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KDL-65S990A

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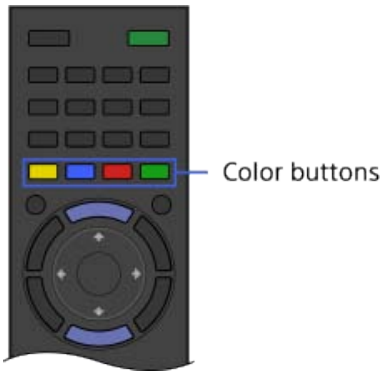
How to Use Bookmarks

You can save frequently viewed pages in this manual. Use the color buttons indicated at the bottom of the screen.

To save a page

In the page to bookmark, press the red button that corresponds to [Add Bookmark] at the bottom of the screen.



To access the bookmarked page

Press the blue button that corresponds to [Show Bookmark] at the bottom of the screen to display the bookmark list. Select the desired title using the ↑/↓ buttons, then press the ⊕ button.

To return to the previous screen

Press the RETURN button.

To remove a bookmark

In a bookmarked page, press the red button that corresponds to [Remove Bookmark] at the bottom of the screen.

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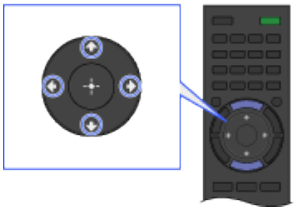
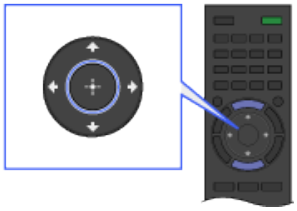
How to use remote

Using ↑/↓/←/→ and ⊕ Buttons

Operate this TV’s functions and settings basically using ↑/↓/←/→ and ⊕ buttons.





1. Select the item on the screen using the ↑/↓/←/→ buttons.
2. Press the ⊕ button to apply the selection.

Using RETURN and Color Buttons

To return to the previous screen

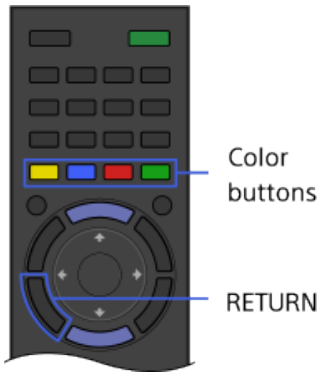
Press the RETURN button.

To operate functions using the color buttons

The color buttons and available functions are indicated at the bottom of the screen.

Press the color button that corresponds to the function you want to use.

The available functions differ depending on the screen.



Related Information

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Overview

The Home Menu, which can be displayed by pressing the HOME button, contains various categories.

Displays content such as TV program, external inputs and function settings, divided into categories. You can first select the category, then select a desired program or external input, or change settings, such as picture quality. The number of categories and available items vary depending on your region/country.

Categories in the Home Menu

[Featured]

Displays recommend information and current information about available applications and content.
If there is no network connection, or the [Featured] display setting is set to [Settings] → [Preferences] → [Home Menu Settings] → [Featured Display] → [Off], the [Featured] category will not be displayed. (This function is available depending on your region/country.)

[History]

Allows you to choose from [History], such as a channel, input, or application that you watched and used recently.
If the History display setting is set to [Off], the [History] category will not be displayed.

[TV]

Allows you to choose from a list of TV channels, or a program guide. (Program guide is available depending on your TV model or region.)

Also, enables timer recordings to a connected USB HDD devices, and selection of recorded content play. (This function may not be available depending on your model/region/country.)
A list of channels registered as favorites in the TV category are displayed.

[Applications]

Launches applications that require an Internet connection. Although most applications need an Internet connection, for Media Player it is not necessary.
A list of applications registered as favorites in the Applications category are displayed.
If you select [All Applications], all applications are displayed as a list.
You can register your favorite applications to [Applications] in the Home Menu by selecting a favorite application icon and pressing the OPTIONS button. You can enjoy more applications if you connect your TV to the Internet. (This function is available depending on your region/country.)

[Connected Devices]

Enables selection of devices connected to the TV.

[Settings]

Provides settings (e.g. picture settings, sound settings, key tone setting) that allow you to customize your TV.

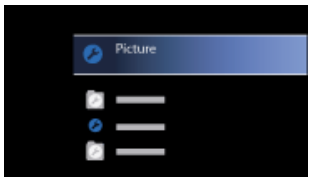
Steps

1. Press the HOME button.
   The Home Menu appears.

2. Select the category using the ↑/↓ buttons.
   (Illustration example: When selecting the [Settings] category.)

3. Select the item using the ←/→ buttons, then press the ⊕ button.
   (Illustration example: When selecting [Picture & Display].)

4. In the displayed screen, perform the operation using the ↑/↓/←/→ and ⊕ buttons.
   (Illustration example: When selecting [Picture Adjustments] using the ↑/↓ and ⊕ buttons.)



To return to the last viewed source, press the HOME button twice.

Tips

- The items you can select may vary depending on the situation.
- Unavailable items are grayed out or not displayed.

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Adjusting various picture settings (e.g. picture brightness/color)

Overview

You can adjust various picture settings, such as picture brightness/color, etc.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Picture & Display] using the ←/→ buttons, then press the ⊕ button.

3. Select [Picture Adjustments] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Setting Memory]
Applies custom picture settings to the current input or to common memory shared by other inputs.

[Picture Mode]
Enables selection of a picture mode according to your preference.
Jump to the page

[Reset]
Resets all the [Picture Adjustments] settings to the factory settings excluding [Setting Memory], [Picture Mode] and [Advanced Settings].

[Backlight]
Adjusts the brightness of the backlight. Reducing the brightness of the screen will reduce the power consumption.

[Picture]
Adjusts picture contrast.

[Brightness]
Adjusts the brightness of the picture.

[Color]
Adjusts color intensity.

[Hue]
Adjusts green and red tones.
([Hue] is available depending on color system.)

[Color Temperature]
Adjusts the whiteness of the picture.
[Cool]: Gives white colors a bluish tint.
[Neutral]: Gives white colors a neutral tint.
[Warm 1]/[Warm 2]: Gives white colors a reddish tint. [Warm 2] gives a redder tint than [Warm 1].

[Sharpness]
Adjusts sharpness of the picture.

[Noise Reduction]
[Auto]: Automatically reduces picture noise.
[High]/[Medium]/[Low]: Modifies the effect of noise reduction.
[Intelligent]: Automatically optimizes picture quality with noise reduction. (This function is available only for analog RF input and composite video input.)
It’s recommended to select [Intelligent] for analog input signal of bad quality.

[Off]: Turns off [Noise Reduction].

[MPEG Noise Reduction]

[Auto]: Automatically reduces noise in MPEG-compressed videos.
[High]/[Medium]/[Low]: Reduces noise in MPEG-compressed videos.
[Off]: Turns off [MPEG Noise Reduction].

[Dot Noise Reduction]

[Auto]: Automatically reduces dot noise around objects on the screen.
[Off]: Turns off [Dot Noise Reduction].

[Reality Creation]

Adjusts detail and noise for a realistic picture.

[Video Area Detection]

Adjusts effect level optimally by detecting video area within a picture.

[Resolution]

Adjusts detail and clarity of the picture.

[Noise Filtering]

Adjusts to reduce noise of the picture.

[Smooth Gradation]

Creates smooth gradations on flat surfaces of the picture.

[Motionflow]

[Smooth]: Provides smoother picture movement; especially effective for film-based content.
[Standard]: Provides smoother picture movement for standard use.
[Clear]: Reduces motion blur while maintaining brightness for high-speed picture content.
[Clear Plus]: Reduces motion blur for high-speed picture content more than [Clear].
[Impulse]: Reproduces original picture quality. Provides cinema-like picture, which may flicker.
[True Cinema]: Images, such as a movie created in 24 frames per second, are reproduced at the original framerate.
[Off]: Use this setting if [Smooth], [Standard], [Clear], [Clear Plus], [Impulse] or [True Cinema] results in a distorted picture.
(Depending on the picture content, you may not see the effect visually even if you have changed the settings.)

[CineMotion]

[Auto]: Displays film-based content with picture expression close to the original by applying a film-specific process.
[Off]: Turns off [CineMotion].
(If the image contains irregular signals or too much noise, this setting is automatically turned off even if [Auto] is selected.)

[Advanced Settings]

[Reset]: Resets all [Advanced Settings] to the default values (except for [White Balance]).
[Black Corrector]: Enhances black areas of the picture for stronger contrast.
[Adv. Contrast Enhancer]: Automatically optimizes [Backlight] and [Picture] according to the brightness of the screen. This setting is effective for dark images and scenes.
[Gamma]: Adjusts the balance between light and dark areas of the picture.
[LED Dynamic Control]: Optimizes contrast by adjusting brightness in individual sections of the screen. ([LED Dynamic Control] is available depending on the TV model.)
[Auto Light Limiter]: Reduces glare such as in scenes where the entire screen is white.
[Clear White]: Emphasizes whiteness in the picture.
[Live Color]: Makes colors more vivid.
[White Balance]: Adjusts red, green and blue level in the screen.
[Detail Enhancer]: Enhances the details of the picture.
[Edge Enhancer]: Enhances the edges of the picture.
[Skin Naturalizer]: Detects faces and reproduces natural skin tone.
[Display Speed Preference]: Reduces the picture delay to optimize the response to game controllers/PC mouse operation by selecting [On].

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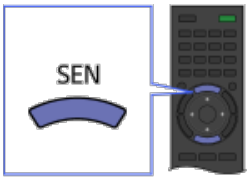
Enjoy Internet on TV

Overview

By pressing the SEN button, the Sony Entertainment Network screen appears, which serves as a gateway to Internet content. From this screen, you can access various services and applications. The items on the Sony Entertainment Network screen differ depending on your region/country, and are subject to change.

Steps

1. Make a broadband Internet connection.
2. Press the SEN button to display the Sony Entertainment Network screen.



3. Select the desired service or website using the ↑/↓/←/→ buttons, then press the ⊕ button.

Tips

- Depending on the service, registration may be required before use.

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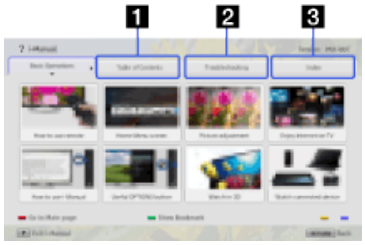
Searching for Information

This i-Manual explains how to use all functions. In the main page of i-Manual, you can select the desired method to search for information.



1 Table of Contents: Searches from a title list.

2 Troubleshooting: Searches for solutions to problems.

3 Index: Searches by function/feature name.

Use the ←/→ buttons to switch between the 1/2/3 tabs.

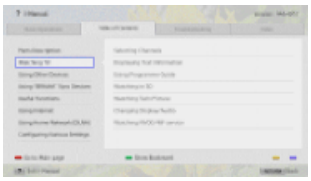
Tips

- The supplied paper manual contains important information such as cautions and operating instructions to prevent accidents. Read the supplied paper manual thoroughly for safe use.

Steps

Procedure example: “Table of Contents” search

1. In the main page of this manual, select the “Table of Contents” tab using the ←/→ buttons.
2. Select a title on the left of the screen using the ↑/↓ buttons, then press the ⊕ button.
   The titles on the right of the screen change according to the title selected on the left of the screen.



3. Select a title on the right of the screen using the ↑/↓ buttons, then press the ⊕ button.
   The page of the selected title appears.
4. Press the → button to proceed to the next page.
   To return to the previous page, press the ← button.

To go to the main page

Press the corresponding color button indicated at the bottom of the screen.

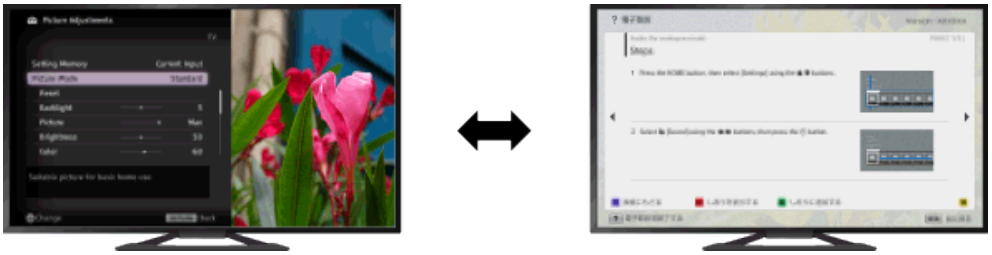
To close the i-Manual

Press the i-MANUAL button.

If you press the i-MANUAL button again, the previously displayed page reappears. If you press the i-MANUAL button after the TV is turned off, the main page appears.

Displaying the Page Again While Operating the TV

Press the i-MANUAL button repeatedly to toggle between the TV screen and previously displayed page of the i-Manual. In this way, you can refer to the i-Manual while operating the TV.



Saving Frequently Viewed Pages (Bookmark)

You can save frequently viewed pages in this manual using a color button. For details on how to bookmark, press the color button that corresponds to [Show Bookmark] at the bottom of the screen.

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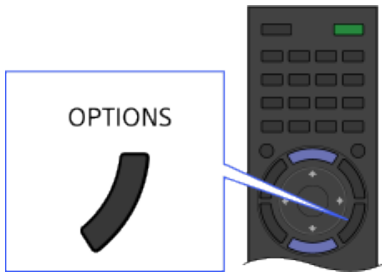
Useful OPTIONS button

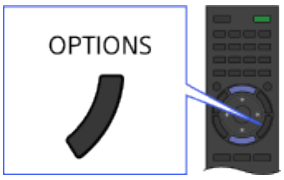
Quickly Accessing Functions by the OPTIONS Button

By pressing the OPTIONS button, the Options Menu appears and provides quick access to the functions that are available for the currently displayed screen. (The items in the Options Menu differ depending on the selected screen.) This provides faster access to functions than from the Home Menu.



Steps

1. Press the OPTIONS button to display the Options Menu.



2. Select an item using the ↑/↓ buttons, then press the ⊕ button.

3. Select an item or value using the ↑/↓/←/→ buttons, then press the ⊕ button.

To return to the previous screen during operation, press the RETURN button.

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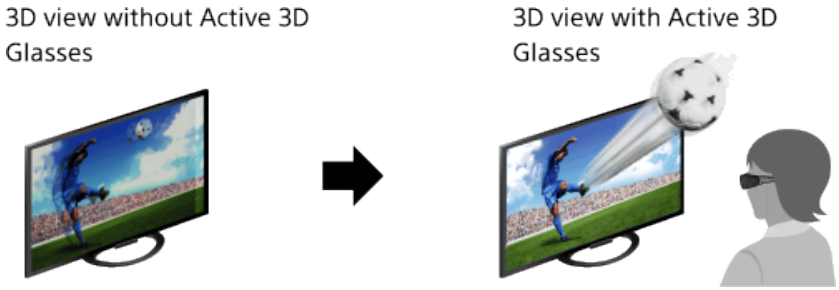
Watching in 3D

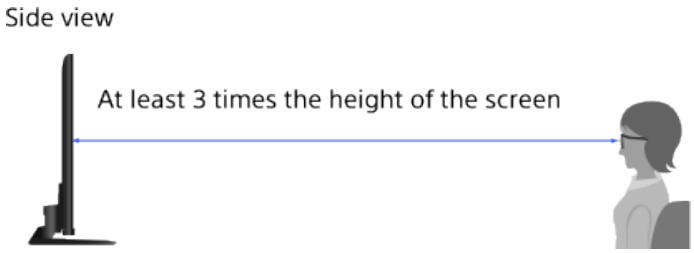
Overview

You can experience powerful 3D entertainment, such as stereoscopic 3D games and Blu-ray 3D Discs. You can also watch regular 2D content with 3D effect.



Recommended viewing distance range for a 3D image

If the viewing distance range is not appropriate, the image may appear doubled. It is recommended to view the TV front on.



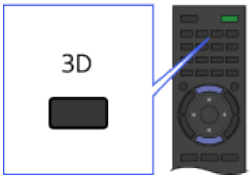
Tips

- If you purchase the optional Passive 3D Glasses, choose model TDG-500P.

Steps

1. Display the content to watch in 3D on the TV screen.
2. Put the Passive 3D Glasses on.
   If no 3D effect is achieved, perform the following steps.

3. Press the 3D button to display the [3D Display] screen.



4. Press the 3D button repeatedly to select the [3D Display] mode to suit the displayed content.
   [3D (Side-by-Side)]: Displays side-by-side pictures in 3D.
   [3D (Over-Under)]: Displays over-under pictures in 3D.
   [3D (Simulated 3D)]: Displays regular 2D pictures in simulated 3D.
   [2D (Left-Only)]: When the same picture is side-by-side, the left side picture is shown expanded, in 2D.
   [2D (Top-Only)]: When the same picture is over-under, the upper picture is shown expanded, in 2D.
   Depending on the input signal or format, [3D (Side-by-Side)]/[3D (Over-Under)]/[2D (Left-Only)]/[2D (Top-Only)] may not be selectable.

To return to the last viewed source, press the HOME button twice.

To exit the 3D Menu, press the RETURN button.

To deactivate the 3D effect

Press the 3D button repeatedly to select [Off] in [3D Display].

To use the SimulView™ mode

This TV corresponds to SimulView™. When watching TV, use the glasses only for SimulView™.

SimulView™ allows two players to view independent screen images in full screen while playing the same game on a shared screen. The image is displayed in 2D. To use this feature, the game software must support SimulView™.

To adjust the 3D settings

You can adjust the following 3D settings.

Press the HOME button, select [Settings] → [Picture & Display] → [3D Settings], then the desired option.

[3D Display]

Opens [3D Display] to switch the display modes.

[3D Depth Adjustment]

Adjusts the depth of 3D pictures on the screen (available only for content with 3D signals). Select [Auto(High)] to always optimize to a visually comfortable depth. Select [Auto(Low)] to provide a visually comfortable depth which is close to the original picture. You can also manually set the adjustment value.

[Simulated 3D Effect]

Heightens/lessens the 3D effect when you display 2D pictures in simulated 3D.

[Auto 3D]

Select [Auto 1] to switch 3D display mode automatically when a 3D signal is detected.
If no 3D signal is detected, select [Auto 2], which will analyze the image for 3D information and switch to 3D display mode automatically.
Select [Off] to prevent 3D display mode from being automatically selected.
Depending on the input signal or format, 3D display mode may not switch automatically.
In such a case, press the 3D button to select 3D display mode manually.

[3D Signal Notification]

Notifies when a 3D signal is detected.

Notes

- When [3D Display] is set to [Off], SimulView™ mode can not be done.
- Depending on the image, one player may see another player’s image when using SimulView™ mode.
- 3D effect is available only when pictures are displayed in full screen.
- Recommended viewing angle and distance may vary depending on the TV’s location and room conditions.
- Simulated 3D effect may be less pronounced with some picture sources.
- Perceived simulated 3D effect may vary from person to person.
- Maintenance of your glasses

  - Wipe the glasses gently with a soft cloth.

  - Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.

  - If using a chemically pretreated cloth, be sure to follow the instructions provided on the package.

- Never use strong solvents such as a thinner, alcohol or benzene for cleaning.

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Watch connected device

Overview

Connect various devices (e.g. BD recorder, digital still camera, PC, smartphone, tablet) to the TV. You can enjoy playing content such as pictures and music on the connected device.

There are two ways to connect.

Cable connection

Network connection

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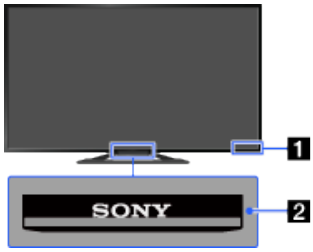

1 Sensors

- Remote control sensor
  Receives signals from the remote control.
  Point the remote control at the Sony logo to operate the TV.
  Do not place anything near the sensor. Doing so may affect its function.
- Light sensor
  Senses room light level and adjusts the screen brightness accordingly.
  Do not place anything near the sensor. Doing so may affect its function.

Illumination LED

2 Illumination

Illumination lights up or blinks in response remote control operations, lights up in different colors according to the status of the TV.

Blinking
(Blinking speed depends on status)

- TV is turned on
- TV is receiving an incoming call *2
- TV is in Picture off mode
- Software update is in progress

Blinking

- When the TV and mobile device (e.g. smartphone) are connected wirelessly

*1

During recording (including SCART REC) or TV is in pause mode *2

*1

The following Timer functions are set:
On Timer, Sleep Timer, Reminder (*2), REC Timer (*2), Picture Frame

- For simultaneous conditions, the upper condition in the table has priority over others.
- Illumination does not light when the TV is in standby mode, except when recording is in progress or the timer is set.

*1: If [Simple Response] is selected in [Illumination LED], illumination does not light continuously but blinks as feedback for operations.

*2: This function is available depending on your region/country.

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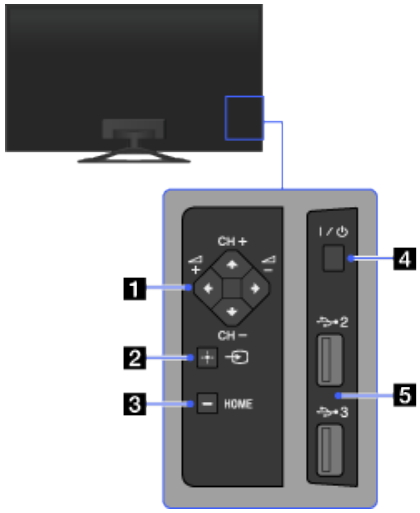

1 CH +/– (Channel)/▲/▼, 🔊 +/– (Volume)/◀/▶

Press to select the next (+) or previous (–) channel.

Press to adjust the volume.

- In the TV Home Menu, these buttons will work as ▲/▼/◀/▶ .

2 ⏎ (Input select)/⊞ (Select/Confirm)

Press to display a list of inputs.

To select the connected device input, press this button repeatedly.

- In the TV Home Menu, this button will work as ⊞ (select/confirm).

3 HOME

Press to display the TV Home Menu.

4 I/⏻ (Power)

Press to turn on the TV or to enter standby mode.

5 USB 2/3

You can enjoy photo, music and video files stored on a USB device.

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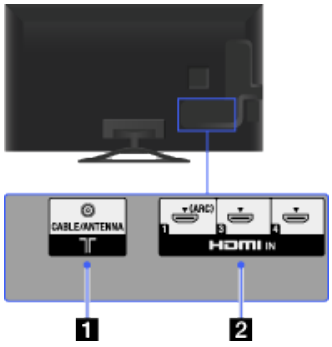

1 ╖

RF input that connects to your cable or antenna.

2 HDMI IN 1/3/4

HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped audio/video device. In addition, when you connect “BRAVIA” Sync-compatible device, communication with the connected device is supported.

- Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.
- If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

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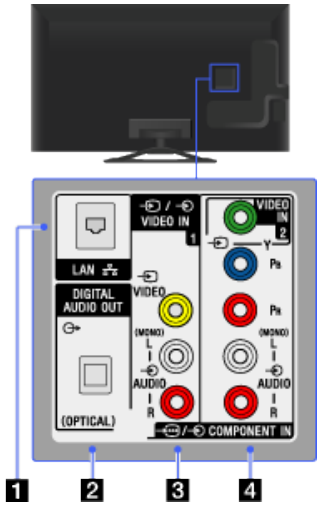
Rear



1 LAN

Connects to an existing network using an Ethernet cable.

2 DIGITAL AUDIO OUT (OPTICAL)

You can listen to TV sound on a connected home theater system with digital input.

3 VIDEO IN 1

Connect with a composite video cable. When connecting mono device, connect to the L (MONO) audio jack.

4 COMPONENT IN, VIDEO IN 2

This input can be used as a composite video input or as a component video input. When connecting mono device, connect to the L (MONO) audio jack.

For composite use, connect to VIDEO IN 2 for video, and to AUDIO (L/R) of COMPONENT IN for audio signals.

For component connection, use Y, PB, PR for video signals and also connect to AUDIO (L/R) for audio signals.

- The TV will automatically detect and switch between VIDEO IN 2 and COMPONENT IN. To manually set the input type, press the HOME button, then select [Settings] → [Channels & Inputs] → [Video 2/Component Selection].

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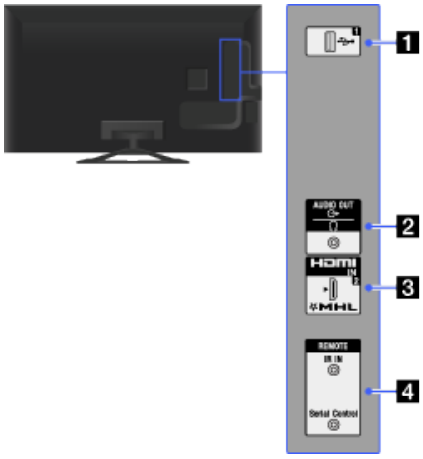

1 USB 1

You can enjoy photo, music and video files stored on a USB device.

2 AUDIO OUT/

Connect your headphones, stereo system or subwoofer to listen to TV sound through the connected equipment.

To listen to TV sound through the connected equipment, press the HOME button, then select [Settings] → [Sound] → [Headphone/Audio Out] → [Headphone], [Audio Out] or [Subwoofer].

- When you set [Audio Out] in [Headphone/Audio Out], select [Fixed] or [Variable], press the HOME button, then select [Settings] → [Sound] → [Audio Out].

3 HDMI IN 2/MHL

HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped audio/video device. You can also connect your MHL device using an MHL cable. In addition, when you connect “BRAVIA” Sync-compatible device, communication with the connected device is supported.

- Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

- If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1 on the bottom of the TV. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

4 REMOTE

These jacks are for receiving the external control signal.

Enables extended command of the RS232C using these jacks (IR IN, Serial Control).

IR IN : connect to the IR out terminal of the home controller.

Serial Control : connect to the RS232C terminal of the home controller.

- Take care not to connect to headphones or external audio system.
- If [RS232C Control] is set to [On], [BRAVIA Sync Settings] is not available.

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- INPUT
  Press to display a list of inputs.
- POWER
  Press to turn on or to turn off the TV (standby mode).
- PIC OFF
  Press to turn picture off, and sound remains on.
- WIDE
  Press to select the wide mode.
- 3D
  Press to select the 3D display mode.
- RELATED SEARCH
  When the TV is connected to the Internet, you can search for related content while watching various content on the TV. (What you can search depends on your region/country or other circumstances.)

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Upper

- **Buttons for connected devices**
  Use the buttons to operate a connected “BRAVIA” Sync-compatible device.
- **Color buttons**
  When the color buttons are available, an operation guide appears on the screen.
  Follow the operation guide to perform a selected operation.
- **? i-MANUAL**
  Press to display the on-screen instruction manual (this manual).
- **SYNC MENU**
  Press to display the BRAVIA Sync Menu to operate a connected “BRAVIA” Sync-compatible device.

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Middle

- SEN
  Press to display Sony Entertainment Network.
- JUMP
  Press to jump back and forth between two channels or inputs. The TV alternates between the current channel or input and the last channel or input that was selected.
- NETFLIX
  Press to access the “NETFLIX” online service.
  This feature (button) may not be available in some regions/countries. Details can be referred in Sony website.
- ↑/↓/←/→/⊕/RETURN
  Press to select/confirm a highlighted item and return to the previous screen, or exit from a menu.
- OPTIONS
  Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.
- HOME
  Press to display the TV Home Menu.

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Lower

- DISPLAY
  Press once to display information about the channel/program/input you are viewing. Press again to exit.
- 0-9
  Press the 0-9 buttons to select a channel.
- ⊡
  Use with the 0-9 buttons to select digital channels. For example, to enter 2.1, press 2, ⊡, 1.
- CC/SUBTITLE
  Press to turn closed captions/subtitles on or off (when the feature is available).

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Bottom

- VOL +/–
  Press to adjust the volume.
- MUTING
  Press to mute the sound. Press again to restore the sound.
- CH +/–
  Press to display the channel selection screen.
- MEDIA
  Press to switch the category in the channel selection screen.

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Upper

- POWER
  Press to turn on or to turn off the TV (standby mode).
- COLOR KEY/COLOR KEY Indicator
  Press to light up the indicator, then the ↑/↓/←/→ buttons are available as color buttons.
  If the COLOR KEY button is pressed again when the color buttons are available, the indicator turns off and the ↑/↓/←/→ buttons become available instead.
- SEN
  Press to display Sony Entertainment Network.
- KEY PAD
  Displays the screen keyboard.
  Buttons on the screen keyboard work the same as those on the remote control.
- ↑/↓/←/→/⊕
  Press to select/confirm a highlighted item.
  When the COLOR KEY button is pressed, the indicator lights up, then the ↑/↓/←/→ buttons are available as color buttons.

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- RETURN
  Press to return to the previous screen, or exit from a menu.
- OPTIONS
  Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.
- HOME
  Press to display the TV Home Menu.
- VOL +/–
  Press to adjust the volume.
- CH +/–
  Press to display the channel selection screen.

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Back

- (NFC)
  Touch the device (e.g. some models of Xperia) corresponding to the One-touch mirroring function, then its screen is displayed on the TV.

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Displaying Screen Keyboard

Overview

You can display the screen keyboard when using the One-touch Remote Control. You can also move the position of the screen keyboard.

Steps

Press the KEY PAD button on the One-touch Remote Control.

The screen keyboard is displayed on the screen.

Select buttons to use using the ↑/↓/←/→ buttons, then press the ⊕ button. The same functions as the remote control buttons can be used.

Press the KEY PAD button to close the screen keyboard.

To move the position of the screen keyboard

Press the arrow mark button on the right or left edge of the screen keyboard to switch the position of the screen keyboard right or left.

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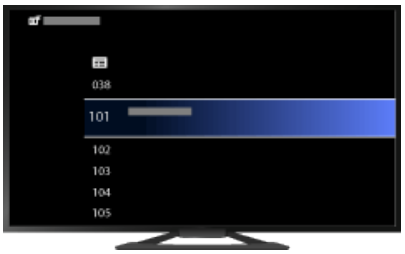
Selecting channels from the Home Menu

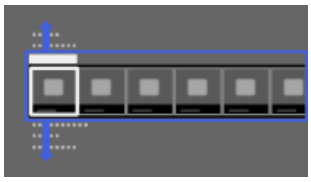
Overview

You can select channels from the TV channel list in the Home Menu.

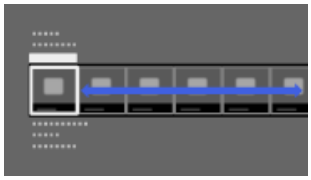


Steps

1. Press the HOME button, then select [TV] using the ↑/↓ buttons.



2. Select [TV Channel List] using the ←/→ buttons, then press the ⊕ button.



3. Select the desired channel from the TV channel list using the ↑/↓ buttons, then press the ⊕ button.

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Selecting channels by the CH +/- buttons

Overview

You can find and tune a desired program in the program list easily with the CH +/- buttons. To enable this feature, set [Settings] → [Preferences] → [Fast Zapping] to [On]. If you set to [Off], the CH +/- buttons work just to toggle through channels.

Steps

1. Press the CH +/- buttons.
2. Press the MEDIA or ←/→ buttons to select the desired category type.
3. Select the desired program from the program list using the CH +/- or ↑/↓ buttons, then press the ⊕ button.

To change the settings later.

Press the HOME button, select [Settings] → [Preferences] → [Fast Zapping], then the desired option.

Available Options

[Auto Program Selection]

[On]: The TV automatically switches to the selected content after a certain period of time, even if the ⊕ button is not pressed.
[Off]: The TV switches to the selected content only when the ⊕ button is pressed.
When launching [Fast Zapping], you can set up this option by pressing the OPTIONS button.

[Fast Zapping]

[On]: When the CH +/- button is pressed, [Fast Zapping] is launched.
[Off]: When the CH +/- button is pressed, the channel is switched one by one as usual.
While watching TV, you can set up this option by pressing the OPTIONS button.

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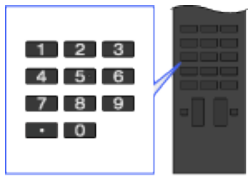
Selecting channels by the number buttons

Steps

Press the number and ⊡ buttons to select the channel.



(For example, to enter 2.1, press 2, ⊡, 1.)

For channel numbers 10 and above, press the second digit quickly after the first.

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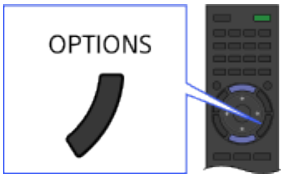
Displaying picture-in-picture (PIP)

Overview

You can watch two pictures (main and sub) simultaneously. The main picture can be displayed in full screen, and the sub picture can be displayed in an inset window (e.g. HDMI input (PC format) and TV program).

Steps

1. Press the OPTIONS button.



2. Select [Twin Picture] using the ↑/↓ buttons, then press the ⊕ button.
   If the displayed source is other than the PC, select [PIP] using the ↑/↓ buttons, then press the ⊕ button.

3. Press ←/→ to switch audio output between the two pictures.

To exit the PIP mode, press the RETURN button.

To move the inset window

Press the ↑/↓ buttons.

Available Combinations of Two Pictures

- When the main picture source is a TV program or video input, the sub picture source can be:

  - HDMI input (video format)

- When the main picture source is an HDMI input (video format or PC format), the sub picture source can be:

  - TV program

  - Video input

Notes

- If two pictures with different vertical frequency signals (e.g. a picture in full screen with 24p and a picture in an inset window with 60i) are displayed simultaneously, the smooth movement of the picture in an inset window may be lost.
- If [Motionflow] is set to other than [Impulse]/[Off], the smooth movement of the picture in an inset window may be lost. (For [Motionflow] compatible models only.) To remedy this, set to [Off]. Press the OPTIONS button, then select [Picture Adjustments] → [Motionflow] → [Off].

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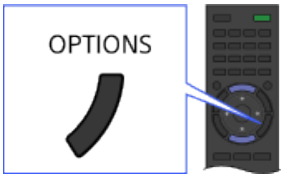
Displaying left-and-right pictures (P&P)

Overview

You can watch two pictures (left and right) simultaneously (e.g. connected device and TV program).

Steps

1. Press the OPTIONS button.



2. Select [Twin Picture] using the ↑/↓ buttons, then press the ⊕ button.

3. Select [P&P] using the ↑/↓ buttons, then press the ⊕ button.
4. Press ←/→ to switch audio output between the two pictures.
   The highlighted picture is audible.

To exit the P&P mode, press the RETURN button.

To change the picture size

Press the ↑/↓ buttons repeatedly to change the size.

Available Combinations of Two Pictures

(Left and right, or vice versa)

- TV program and HDMI input (video format)
- Video input and HDMI input (video format)

Notes

- This function is not available with PC format signals.
- If two pictures with different vertical frequency signals (e.g. a left picture with 24p and a right picture with 60i) are displayed side-by-side, the smooth movement of the right picture may be lost.

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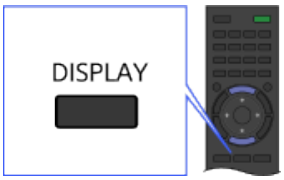
Display information

Steps

While watching a program, press the DISPLAY button.

The information about the current channel/program/input appears. The information will time out in a few seconds or press the DISPLAY button again to exit.



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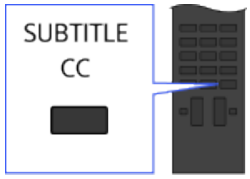
Subtitles/Closed captions

Steps

While watching a program with subtitles/closed captions, press the CC/SUBTITLE button to turn the subtitles/closed captions on or off.



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Screen format/Wide Mode

Steps

Press the WIDE button repeatedly to select the desired option, then press the ⊕ button.

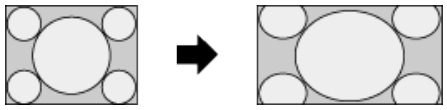
Tips

- Based on the original signal source, a black frame or black bars may surround the picture.

Available Options (4:3 Original Source)

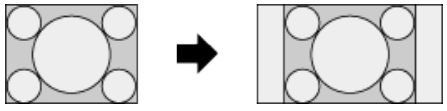
[Wide Zoom]

Enlarges the picture to fill a 16:9 screen, preserving the original picture as much as possible.



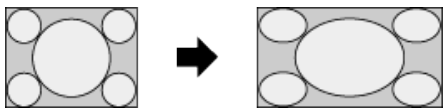
[Normal]

Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.



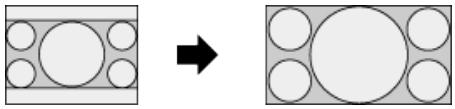
[Full]

Stretches the 4:3 picture horizontally, to fill the 16:9 screen.



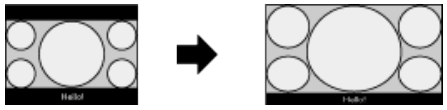
[Zoom]

Displays a 16:9 picture that has been converted into 4:3 letter box format, in the correct aspect ratio.



[Captions]

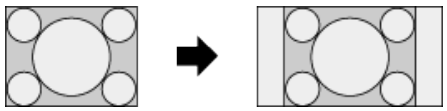
Stretches the picture horizontally to fill a 16:9 screen, while fitting captions in the screen.



If component input (480p) is selected and [Scene Select] is set to [Game] or [Graphics], the available options change to [Fine-Normal]/[Fine-Full]/[Portable Game 1]/[Portable Game 2].

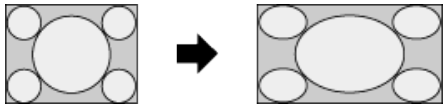
[Fine-Normal]

Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.



[Fine-Full]

Stretches the 4:3 picture horizontally, to fill the 16:9 screen.

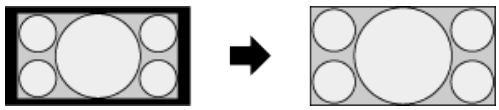


[Portable Game 1]

Stretches a black-framed game picture from PlayStation®Portable.

[Portable Game 2]

Stretches a black-framed picture (e.g. browser) from PlayStation®Portable.



Available Options (16:9 Original Source)

[Wide Zoom]

Enlarges the picture, preserving the original picture as much as possible.

[Normal]

Displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.

[Full]

Displays a 16:9 picture in its original size.

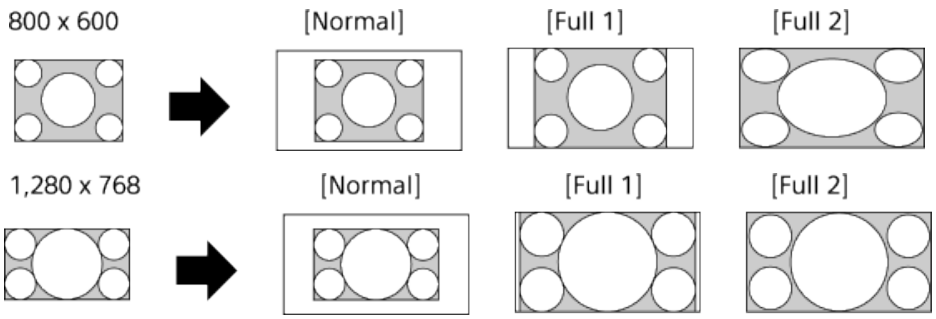
[Zoom]

Displays a 16:9 picture that has been converted into 4:3 letter box format, in the correct aspect ratio.

[Captions]

Stretches the picture horizontally, while fitting captions in the screen.

Available Options (PC Timing)



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Audio (for analog mode)

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.

3. Select [MTS Audio] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Tips

- To select sound on digital channels, press the OPTIONS button, then select [Alternate Audio].

Available Options

[Stereo]
Adjusts sound for stereo reception.

[Auto SAP]
Adjusts sound for second channel audio of programs such as bilingual.

[Mono]
Adjusts sound for monaural reception. Use this option when the stereo

signal is unstable.

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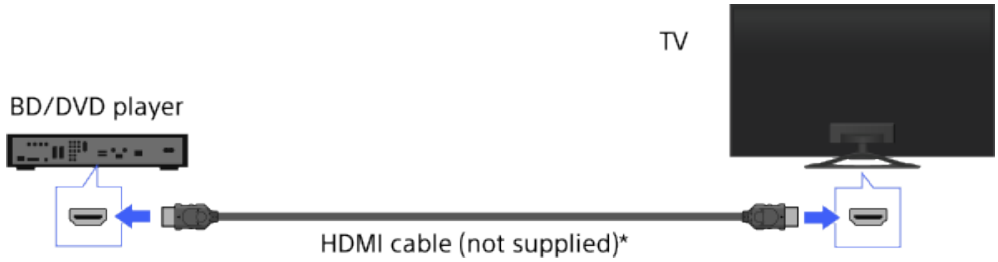
HDMI connection

Making a Connection

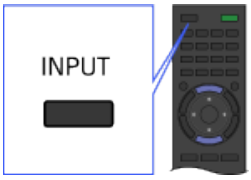
HDMI connection is recommended for optimum picture quality. If your BD/DVD player has an HDMI jack, connect it using an HDMI cable.



* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repeatedly to select the connected BD/DVD player.



3. Start playback on the connected BD/DVD player.

Tips

- If you connect a “BRAVIA” Sync-compatible device, you can control it by simply using the TV’s remote control.

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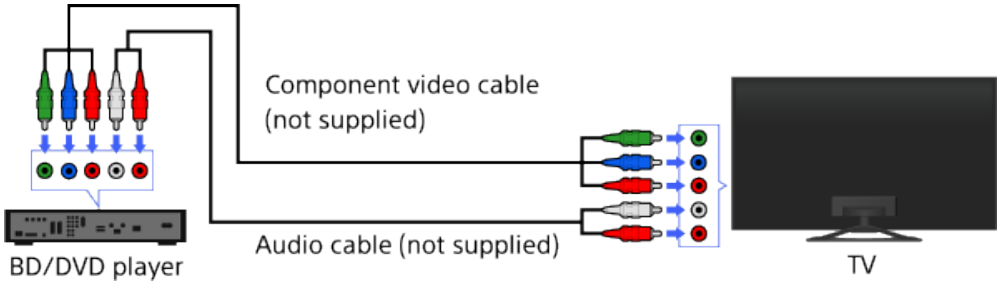
Component video connection

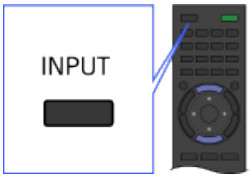
Making a Connection

If your BD/DVD player has component video jacks, connect it to the TV using a component video cable and an audio cable.



Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repeatedly to select the connected BD/DVD player.



3. Start playback on the connected BD/DVD player.

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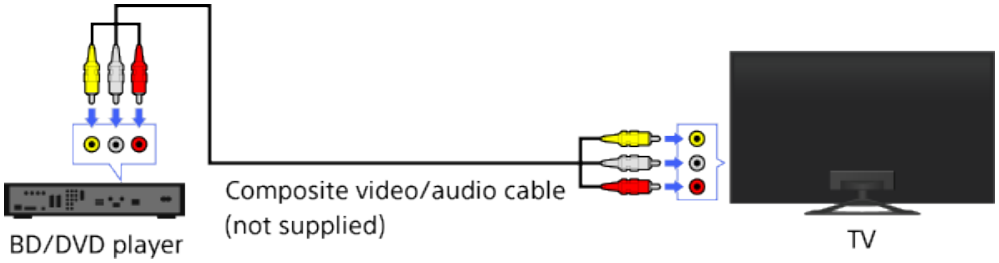
Composite connection

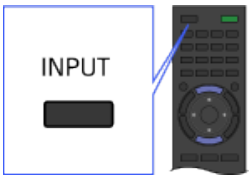
Making a Connection

If your BD/DVD player has composite jacks, connect it using a composite video/audio cable.



Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repatedly to select the connected BD/DVD player.



3. Start playback on the connected BD/DVD player.

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Digital Still Camera/Camcorder

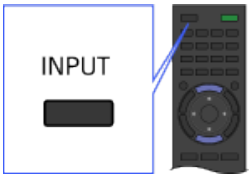
Making a Connection

Connect your Sony digital still camera or camcorder using an HDMI cable. Use a cable that has an HDMI mini jack for digital still camera/camcorder end, and a standard HDMI jack for the TV end.

* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Steps

1. After making a connection, turn on the connected digital still camera/camcorder.
2. Press the INPUT button repeatedly to select the connected digital still camera/camcorder.



3. Start playback on the connected digital still camera/camcorder.

Tips

- If you connect a “BRAVIA” Sync-compatible device, you can control it by simply using the TV’s remote control. Make sure that the device is “BRAVIA” Sync-compatible. Some devices may not be compatible with “BRAVIA” Sync even though they have an HDMI jack.

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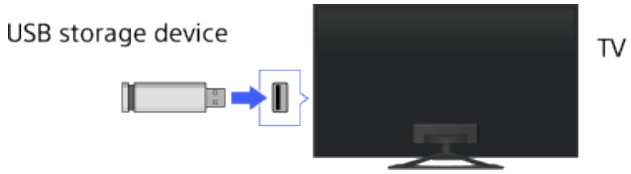
USB Device

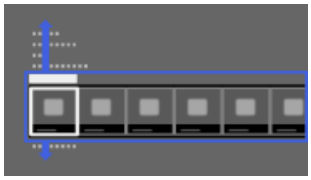
Making a Connection

Connect the USB storage device to enjoy photo, music and video files stored in the device.

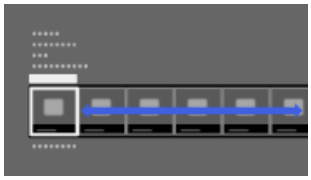


Steps

1. After making a connection, turn on the connected USB device.
2. Press the HOME button, then select [Connected Devices] using the ↑/↓ buttons.



3. Select [USB] using the ←/→ buttons, then press the ⊕ button.



4. Select [Photo], [Music] or [Video] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the folder or file from the list using the ↑/↓ buttons, then press the ⊕ button.
   If you select a folder, select the file using the ↑/↓ buttons, then press the ⊕ button.
   Playback starts.

To return to the last viewed source, press the HOME button twice.

To automatically display thumbnail view or a slideshow

You can set to automatically display thumbnail view or a slideshow when a USB device containing photo files is connected.

You can also set to not automatically display a slideshow or thumbnail view.

Press the HOME button, then select [Settings] → ▭ [Channels & Inputs]/[Channels, Inputs & Ginga]* → [USB Auto Start] → [Browse Photos], [Start Slideshow] or [Off].

* Option name differs depending on your region/country.

To check the supported file formats

Codec List

Tips

- Photo files must be stored in a folder under the DCIM folder for automatic playback start. Also, the folder name under the DCIM folder is required to be a combination of 3 numerals and 5 letters (can include “_”), for example, 101MSDCF.

Notes

- USB viewer supports FAT16, FAT32 and exFAT file systems.
- When connecting a Sony digital still camera to the TV with a USB cable, USB connection settings on your camera need to be set to [Auto] or [Mass Storage] mode.
- [Face Zoom] and [Expanded] in the option menu of [Display Size] may not work for some image files.
- Only the panoramic JPEG files in the following horizontal/vertical sizes can be scrolled. (If the JPEG file is edited on a PC, etc., scroll may not be possible.)

  - For horizontal scroll: 4912/1080, 7152/1080, 3424/1920, 4912/1920, 12416/1856, 8192/1856, 5536/2160, 3872/2160, 10480/4096, 11520/1080

  - For vertical scroll: 1080/4912, 1080/7152, 1920/3424, 1920/4912, 1856/12416, 1856/8192, 2160/5536, 2160/3872, 4096/10480, 1080/11520
- Video files are located in the following folder structure (hierarchal position):
  /AVCHD/BDMV/STREAM/00000.MTS
  /PRIVATE/AVCHD/BDMV/STREAM/00000.MTS
  /MP_ROOT/100ANV01/MAHA0001.MP4
- Avoid losing your files by backing up all your media files stored on a USB device. Sony cannot accept responsibility for lost or damaged data stored on a USB device.

- Depending on the file, playback may not be possible even when using the supported formats.

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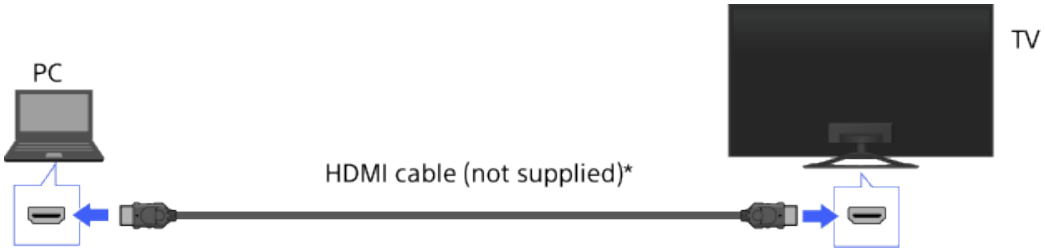
PC

Making a Connection

Connect your PC with an HDMI cable to enjoy music, pictures and other content stored in it.



* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Corresponding PC input signal

(Resolution, Horizontal frequency/Vertical frequency)

- 640 x 480, 31.5 kHz/60 Hz
- 800 x 600, 37.9 kHz/60 Hz
- 1024 x 768, 48.4 kHz/60 Hz
- 1280 x 768, 47.4 kHz/60 Hz and 47.8 kHz/60 Hz
- 1360 x 768, 47.7 kHz/60 Hz
- 1280 x 1024, 64.0 kHz/60 Hz (Full HD model only)
- 1920 x 1080, 67.5 kHz/60 Hz (Full HD model only)*

* The 1080p timing, when applied to the HDMI input, will be treated as a video timing and not a PC timing. This will affect the [Preferences] and [Picture & Display] settings. To view PC content, set [Scene Select] to [Graphics], [Wide Mode] to [Full], and [Display Area] to [Full Pixel]. ([Display Area] is configurable only when [Auto Display Area] is set to [Off].)

Notes

- This TV does not support interlaced signals.
- For optimum picture quality, it is recommended that you use the signals in the chart. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)
- Depending on the connection status, image may be blurred or smeared. In this case, change the PC’s settings, then select another input signal in “Corresponding PC input signal”.
- 1920 pixel x 1080 line/60Hz output may not be available, depending on your PC. Even if you 1920 pixel x 1080 line/60Hz output is selected, the actual output signal may differ. In this case, change the PC’s settings, then select another input signal in “Corresponding PC input signal”.

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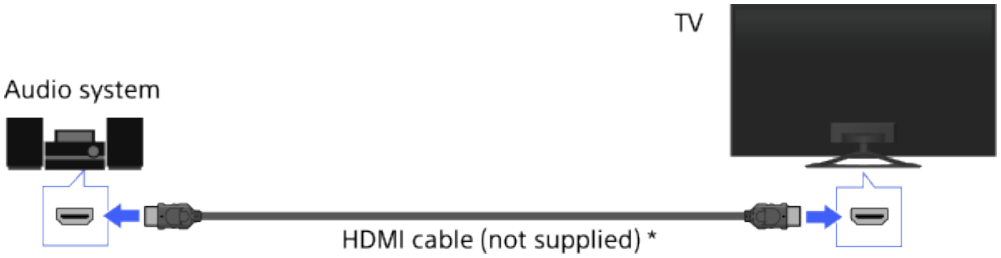
HDMI connection

Making a Connection

Connect an audio system (e.g. home theater system) with HDMI output to the TV, using an HDMI cable.



* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Tips

- When connecting a “BRAVIA” Sync-compatible digital audio system and Audio Return Channel (ARC) technology, connect to HDMI IN 1 with an HDMI cable. However, if connecting a system that is not “BRAVIA” Sync-compatible or Audio Return Channel, an additional audio connection via DIGITAL AUDIO OUT (OPTICAL) is necessary.

Steps

1. After making a connection, press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Speakers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Audio System] using the ↑/↓ buttons, then press the ⊕ button.
   The connected audio system is turned on automatically. The volume can be controlled using the TV’s remote control.

To return to the last viewed source, press the HOME button twice.

Tips

- If you connect a “BRAVIA” Sync-compatible device, you can control it by simply using the TV’s remote control.

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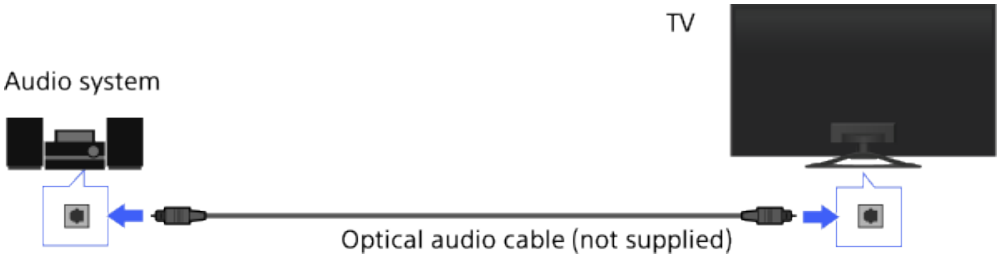
Optical audio connection

Making a Connection

Connect an audio system (e.g. home theater system) with digital input to the TV using an optical audio cable.



Steps

1. After making a connection, press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Speakers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Audio System] using the ↑/↓ buttons, then press the ⊕ button.
5. Press the HOME button twice to return to the last viewed source.
6. Turn on the connected audio system, then adjust the volume.

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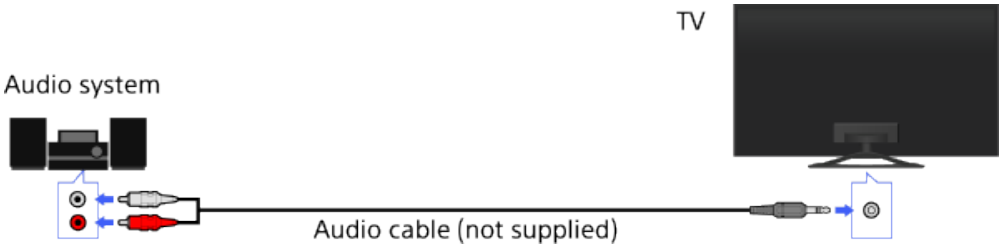
Audio cable connection

Making a Connection

Connect an audio system (e.g. amplifier) to the TV using an audio cable.



Tips

- See the instruction manual of the audio system for details on connection of other devices and for the setup before use.

Steps

1. After making a connection, press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Headphone/Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
5. Press the HOME button twice to return to the last viewed source.
6. Turn on the connected audio system, then adjust the volume.

Tips

- When using an external audio system, the audio out of the TV can be controlled using the TV’s remote control if [Audio Out] is set to [Variable]. Press the HOME button, then select [Settings] → [Sound] → [Audio Out] → [Variable].

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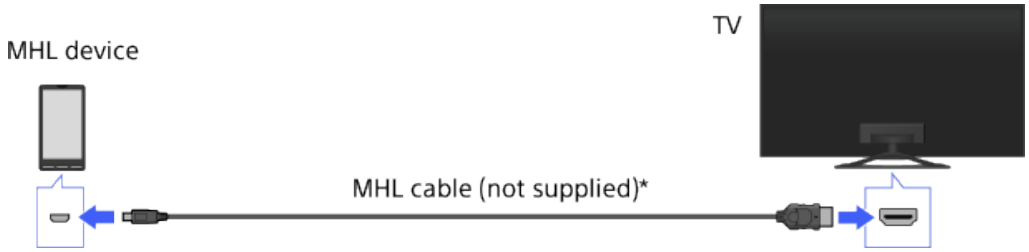
MHL Device

Making a Connection

Connect your MHL device (e.g. smartphone, tablet) with MHL output to the TV's HDMI IN 2/MHL port, using an MHL cable.



* Be sure to use an authorized MHL2 cable bearing the MHL logo.

Steps

1. After making a connection, press the HOME button, then select [Connected Devices] using the ↑/↓ buttons.
2. Select [HDMI 2/MHL] using the ←/→ buttons, then press the ⊕ button.

To switch to MHL input automatically

Press the HOME button, then select [Settings] → [External Inputs] → [BRAVIA Sync Settings] → [Auto Input Change(MHL)] → [On]. (Depending on the MHL device, input may not be switched.) If the TV is in standby mode, it will not switch automatically. Perform steps 1 and 2 above.

To charge an MHL device

Press the HOME button, then select [Settings] → [External Inputs] → [Charge MHL during Power Off] → [On].

Tips

- When the TV is on, an MHL device can be charged from the TV using an MHL cable.
- When the TV is in standby mode, if [Charge MHL during Power Off] is set to [On], an MHL device can be charged from the TV using an MHL cable.

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Setting “BRAVIA” Sync

Overview

If a “BRAVIA” Sync-compatible device (e.g. BD player, AV amplifier) is connected with an HDMI cable, or a “BRAVIA” Sync-compatible device (e.g. smartphone, tablet) is connected with an MHL cable, this TV allows you to control the device with the TV’s remote control.

Steps

1. Turn on the connected device.
2. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

3. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.

4. Select [BRAVIA Sync Settings] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [BRAVIA Sync Control] using the ↑/↓ buttons, then press the ⊕ button.

6. Select [On] using the ↑/↓ buttons, then press the ⊕ button.
7. Activate “BRAVIA” Sync on the connected device.
   When a specific Sony “BRAVIA” Sync-compatible device is connected and powered on, and [BRAVIA Sync Control] is set to [On], “BRAVIA” Sync is automatically activated on that device.
   For details, refer to the instruction manual of the connected device.

* Option name differs depending on your region/country.

To return to the last viewed source, press the HOME button twice.

To not turn off the connected device automatically when turning off the TV

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [Device Auto Power Off] → [Off].

* Option name differs depending on your region/country.

To not turn on the TV automatically when turning on the connected device

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [TV Auto Power On] → [Off].

* Option name differs depending on your region/country.

To switch the TV input to the corresponding device connected with an MHL cable

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [Auto Input Change(MHL)] → [On].

* Option name differs depending on your region/country.

Available “BRAVIA” Sync Operations

BD/DVD player

- Automatically turns the “BRAVIA” Sync-compatible device on and switches the input to that device when you select it from the Home Menu or Sync Menu.
- Automatically turns the TV on and switches the input to the connected device when the device starts to play.
- Automatically turns the connected device off when you turn the TV off.
- Controls menu operation (↑/↓/←/→ buttons), playback (e.g. ► button) and channel selection of the connected device through the TV’s remote control.

AV amplifier

- Automatically turns the connected AV amplifier on and switches the sound output from the TV speaker to the audio system when you turn the TV on. This function is only available if you have previously used the AV amplifier to output TV sound.
- Automatically switches the sound output to the AV amplifier by turning the AV amplifier on when the TV is turned on.
- Automatically turns the connected AV amplifier off when you turn the TV off.
- Adjusts the volume (VOL +/– buttons) and mutes the sound (MUTING button) of the connected AV amplifier through the TV's remote control.

Video camera

- Automatically turns the TV on and switches the input to the connected video camera when the connected video camera is turned on.
- Automatically turns the connected video camera off when you turn the TV off.
- Controls menu operation (↑/↓/←/→ buttons), playback (e.g. ► button) and channel selection of the connected video camera through the TV's remote control.

Notes

- "BRAVIA Sync Control" ("BRAVIA" Sync) is only available for a connected "BRAVIA" Sync-compatible device that has the "BRAVIA" Sync logo.

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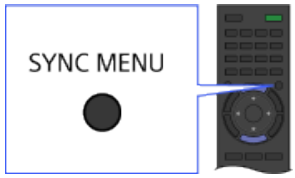
Using the Sync Menu

Overview

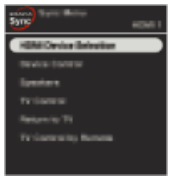
Sync Menu provides various functions such as controlling the connected device by the TV’s remote control, etc.

Steps

1. Press the SYNC MENU button.



2. Select the desired item in the Sync Menu using the ↑/↓ buttons, then press the ⊕ button.



To exit the Sync Menu, press the SYNC MENU button.

Tips

- If you press the SYNC MENU button, the promotion screen is displayed in the following cases.
  - An HDMI or MHL device is not connected.
  - [BRAVIA Sync Control] is set to [Off].

Available Items

[Device Selection]
Enables selection of a “BRAVIA” Sync-compatible device to be controlled by the TV’s remote control.

[Device Control]
Displays the menu, options and title list of the connected device, or turns the device off.

[Use TV speakers to output sound]/[Use audio system for audio output]
Switches the speaker output between the TV and the connected audio device.

[TV Control]
Displays the menu and options of the TV, or shows/hides the display items on the TV screen.

[Return to TV]
Returns to TV channels.

[TV control with the TV remote]/[Device control with the TV remote]
Switches the device to be controlled by the TV’s remote control, between the TV and the connected device.

Tips

- Any “BRAVIA” Sync-compatible device (except an audio system) is listed as a new input source under [Connected Devices] in the Home Menu.

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Setting Buttons to Control the HDMI/MHL Device

Overview

You can set the remote control buttons of the TV to control the connected HDMI/MHL device.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.

3. Select [BRAVIA Sync Settings] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Device Control Keys] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

* Option name differs depending on your region/country.

To return to the last viewed source, press the HOME button twice.

Available Options

[None]
Deactivates the control by the TV’s remote control.

[Normal]
Enables basic operations, such as navigation buttons (up, down, left or right, etc.).

[Tuning Keys]
Enables basic operations and operation of channel-related buttons, such as the CH +/– buttons or the 0 - 9 buttons, etc.
Useful when you control a tuner or set-top box, etc., via the remote control.

[Menu Keys]
Enables basic operations and operation of the HOME/OPTIONS buttons.
Useful when you control BD player menus, etc., via the remote control.

[Tuning and Menu Keys]
Enables basic operations and operation of the HOME/OPTIONS buttons and channel-related buttons.

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Displaying the “BRAVIA” Sync Device List

Overview

You can display a list of connected “BRAVIA” Sync-compatible devices.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.

3. Select [BRAVIA Sync Settings] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [BRAVIA Sync Device List] using the ↑/↓ buttons, then press the ⊕ button.

* Option name differs depending on your region/country.

To return to the last viewed source, press the HOME button twice.

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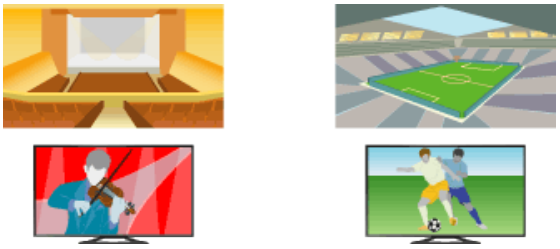
Selecting a picture and sound setting suitable for the content

Overview

You can select a preset picture and sound setting (e.g. [Auto], [Cinema], [Sports]) that suits the content.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Scene Select] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Auto]
Automatically selects the scene based on the viewing content.

[Auto (24p Sync)]
Automatically selects "Cinema" for 24Hz signal content. Behaves as "Auto" for all other signals.

[General]
Turn off Scene Select for general content.

[Cinema]
Optimal picture and sound for watching movies.

[Sports]
Optimal picture and sound for watching sports.

[Music]
Optimal sound for listening to music.

[Animation]
Optimal picture for watching animation

[Photo]
Optimal picture for viewing photos. This setting will apply to 1080i/p (50/60Hz) and 480/576p formats only. (1080i/p (50Hz) and 576p are available depending on your region/country.)

[Game]
Optimal picture and sound for playing video games.

[Graphics]
Optimal picture for viewing tables and characters.

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Automatically adjusting picture brightness according to ambient light

Overview

The picture brightness can be automatically adjusted according to the ambient light. You can save power consumption with an optimized picture brightness.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Eco] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Light Sensor] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [On] using the ↑/↓ buttons to enable this function, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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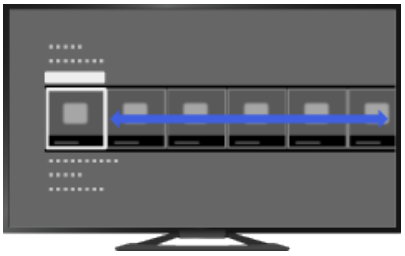
Adding to Favorites

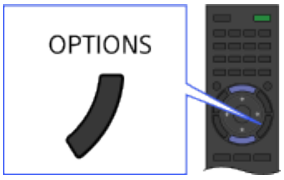
Overview

You can quickly access your frequently used items, such as TV channels or applications, by adding them to Favorites.



Steps

1. Display a channel to add to Favorites.
   In the case of adding an application, press the HOME button, select [Applications] → [All Applications], then the desired application.
2. Press the OPTIONS button.



3. Select [Add to Favorites] using the ↑/↓ buttons, then press the ⊕ button.
   In the case of adding an application, select [Add to Home Menu] using the ↑/↓ buttons, then press the ⊕ button.
   Depending on the model, in the case of a digital channel, select [Edit Favourites] → [Add to Favorites] using the ↑/↓ buttons, then press the ⊕ button.

To access items added to Favorites

Press the HOME button, select [TV]/[Applications], then the desired item.

To remove an item from Favorites

Display the item to delete, press the OPTIONS button, then select [Remove from Favorites].

In the case of removing an application, press the HOME button, select [Applications], then the desired application. Press the OPTIONS button, then select [Remove from Applications].

Depending on the model, in the case of a digital channel, display the item to delete, then press the OPTIONS button. Select [Edit Favourites] → [Remove from Favorites].

To sort the list of applications

Press the HOME button, select [Applications] using the ↑/↓ buttons.

Select the desired item, press the OPTIONS button, then select [Move Application]. The selected applications move to the desired portions by using ←/→ buttons at the sorting applications screen.

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Saving power by picture brightness

Overview

You can reduce power consumption by changing the picture brightness.

Dark picture
(High power saving)

Bright picture
(Low power saving)

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Eco] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Power Saving] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Picture Off]
Maximum power saving. Picture turns off; sound remains on.

[High]
High power saving. Picture darkens.

[Low]
Low power saving. Picture darkens slightly.

[Off]
No power saving.

Tips

- If the power is turned off while [Picture Off] is set, [Power Saving] will be set to [Off] when the power is turned on next time.

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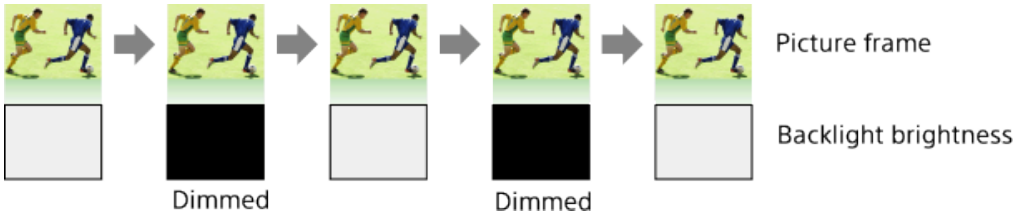
Saving power by automatically adjusting the backlight drive

Overview

The TV adjusts the backlight brightness according to the [Scene Select] setting. You can save power by enabling this function.

Example of backlight adjustment:



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Eco] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Scene Select Sync] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [On] using the ↑/↓ buttons to enable this function, then press the ⊕ button.

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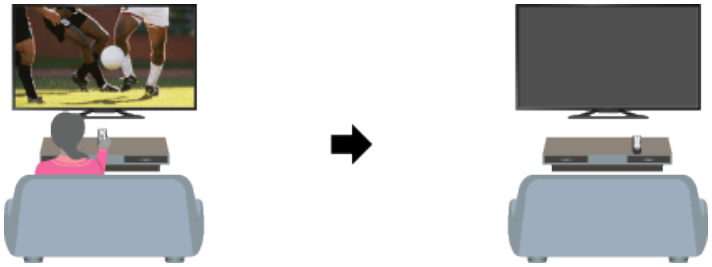
Turning the TV off by monitoring idle time

Overview

You can set the TV to turn off automatically after it has been idle for a preset period.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Eco] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Idle TV Standby] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the period using the ↑/↓ buttons, then press the ⊕ button.
When the set time passes, power will turn off automatically. If [Off] is selected, power will not turn off.

To return to the last viewed source, press the HOME button twice.

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Turning the TV off by monitoring input signal

Overview

You can set the TV to turn off automatically when no broadcast or external input signal is detected for 15 minutes.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Eco] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Auto Shut-off] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [On] using the ↑/↓ buttons to enable this function, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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Setting the current time manually

Overview

The current time is set automatically if the TV receives the time from a digital broadcast signal. If the TV cannot receive digital broadcast signal, set the current time manually.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Clock/Timers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Current Time] using the ↑/↓ buttons, then press the ⊕ button.
5. Press the ⊕ button in [Date (Month/Day/Year)].
6. Set the date using the ↑/↓/←/→ buttons, then press the ⊕ button.
7. Select [Time] using the ↓ button, then press the ⊕ button.
8. Set the time using the ↑/↓/←/→ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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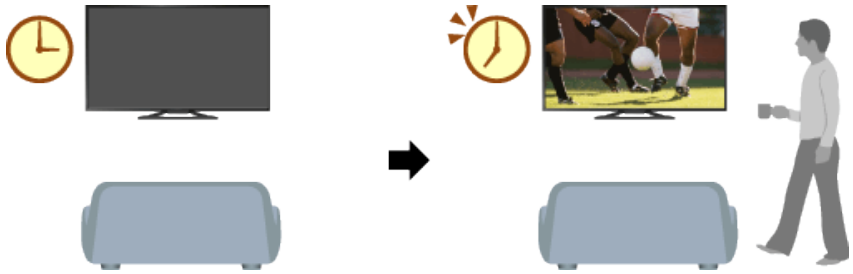
Setting the on timer

Overview

You can set the TV to turn on from standby mode at a selected time.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Clock/Timers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Timer] using the ↑/↓ buttons, then press the ⊕ button.
5. Press the ⊕ button in [Timer].
6. Select [On] using the ↑/↓ buttons, then press the ⊕ button.
7. Select the setting item using the ↑/↓ buttons, then press the ⊕ button.
8. Set the item using the ↑/↓/←/→ buttons, then press the ⊕ button.

9. Repeat steps 7 and 8 to set all items.

To return to the last viewed source, press the HOME button twice.

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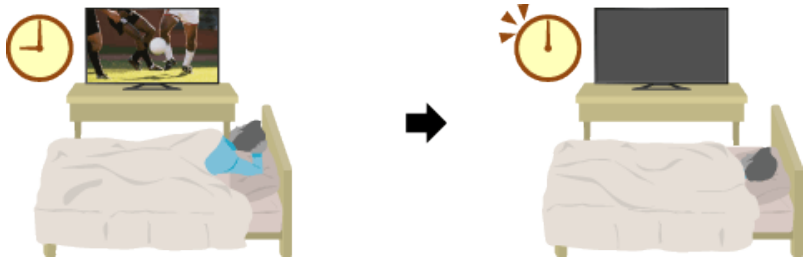
Setting the sleep timer

Overview

You can set the TV to turn off after a preset period.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Clock/Timers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Sleep Timer] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the period until the TV turns off using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Notes

- When you turn off the TV and turn it on again, [Sleep Timer] is reset to [Off].

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Using TV as Picture Frame

Overview

You can set a photo in the connected USB device, network device or preset picture folder to be displayed for a specified period.

Steps

1. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

2. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

3. Select [Media Player] using the ↑/↓/←/→ buttons, then press the ⊕ button.
4. Select [Photo] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the USB device, server or preset picture folder containing the file to play using the ↑/↓/←/→ buttons, then press the ⊕ button.
6. Select the folder or file from the list using the ↑/↓/←/→ buttons, then press the ⊕ button.
   If you select a folder, select the file using the ↑/↓/←/→ buttons, then press the ⊕ button.

The photo is displayed.

7. Press the OPTIONS button.
8. Select [File Actions] using the ↑/↓ buttons, then press the ⊕ button.
9. Select [Picture Frame] using the ↑/↓ buttons, then press the ⊕ button.
10. Press the RETURN button repeatedly to return to step 5 to the device selection list.
11. Select [Picture Frame] using the ↑/↓/←/→ buttons, then press the ⊕ button.

To change the duration period

In the Picture Frame mode, press the OPTIONS button, select [Duration], then the desired option.

Notes

- The TV automatically switches to standby mode after a specified period.

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Setting parental lock password

Overview

Set the 4-digit password for parental lock. The password will be required when you change the parental lock settings.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Parental Lock] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Password] using the ↑/↓ buttons, then press the ⊕ button.
5. Enter the password using the number buttons.
6. Re-enter the password using the number buttons to confirm, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Tips

- For the password, refer to Troubleshooting in the paper manual supplied with this TV.

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Setting viewing restriction

Overview

You can lock any event rated as unsuitable for below a specified limit. (This function is available depending on your region/country.)

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Parental Lock] using the ↑/↓ buttons, then press the ⊕ button.
4. Press the ⊕ button in [Password].
5. Enter the password using the number buttons.
6. Select [Country] using the ↑/↓ buttons, then press the ⊕ button.
   This step may not be available depending on your region/country. Skip this step if unavailable.

7. Select the country in which you apply parental rating using the ↑/↓ buttons, then press the ⊕ button.
   This step may not be available depending on your region/country. Skip this step if unavailable.
8. Select [Rating]/[Digital Rating] using the ↑/↓ buttons, then press the ⊕ button.
9. Select [Child], [Youth], [Young Adult] or [Custom] using the ↑/↓ buttons, then press the ⊕ button.
   When selecting [Custom], select the desired option using the ↑/↓/←/→ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

To download digital rating data (available depending on your region/country)

Press the HOME button, select [Settings] → [Preferences] → [Parental Lock] → [Password], then enter the password. Select [Downloadable U.S. Rating]/[Digital Rating] → [Custom], then the desired options.

To block programs or movies without a rating (available depending on your region/country)

Press the HOME button, select [Settings] → [Preferences] → [Parental Lock] → [Password], then enter the password. Select [Unrated] → [Block].

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Blocking specific channels

Overview

You can block channels regardless of program ratings, by specifying the channel number.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Parental Lock] using the ↑/↓ buttons, then press the ⊕ button.
4. Press the ⊕ button in [Password].
5. Enter the password using the number buttons.
6. Select [Channel Block]/[Analog Channel Block] using the ↑/↓ buttons, then press the ⊕ button.
7. Select the channel to be blocked using the ↑/↓ buttons, then press

the ⊕ button.
You can also select the channel by entering the channel number using the number buttons.

8. Select [Blocked] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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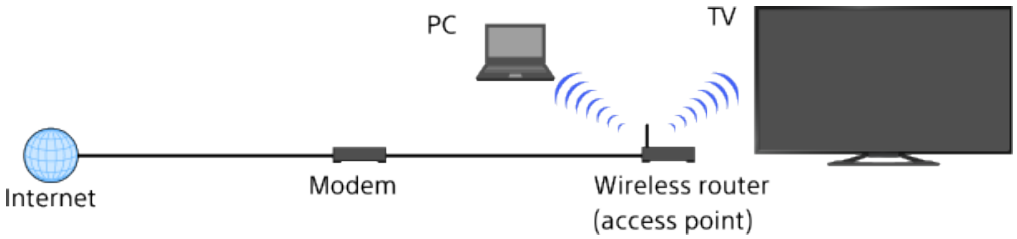
Wireless connection (built-in wireless LAN)

Making a Connection

The built-in wireless LAN device allows you to access the Internet and enjoy the benefits of networking in a cable-free environment.



Steps

1. Set up your wireless router (or access point).
   For details, refer to the instruction manual of your wireless router (or access point), or contact the person who set up the network connection (network administrator).
2. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

3. Select [Network] using the ←/→ buttons, then press the ⊕ button.

4. Select [Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Set up network connection] using the ↑/↓ buttons, then press the ⊕ button.
6. Select [Auto] using the ↑/↓ buttons, then press the ⊕ button.

7. Follow the on-screen instructions to complete the setup.
8. After completing the setup, select [Refresh Internet Content] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

To turn off the built-in wireless LAN

Press the HOME button, then select [Settings] → [Network] → [Built-in Wireless LAN] → [Off].

Tips

- For smooth video streaming:

  - Change the setting of your wireless router (or access point) to 802.11n if possible. For details on how to change the setting, refer to the instruction manual of your wireless router (or access point), or contact the person who set up the network connection (network administrator).

  - If the above does not bring any improvement, try using the USB Wireless LAN Adapter UWA-BR100 and change the setting of your wireless router (or access point) to 5GHz, which may help improve the video streaming quality.

- To set WEP security of the wireless router (or access point), select [Custom] → [Wireless Setup] → [Scan].
- To set WPS PIN, select [Custom] → [Wireless Setup] → [WPS (PIN)].
- If you want to connect the TV with your wireless router (or access point) at 5GHz, use the USB Wireless LAN Adapter UWA-BR100. The USB Wireless LAN Adapter may not connect directly to the TV's USB port, depending on your TV model. In this case, do not forcibly connect the USB Wireless LAN Adapter directly. Be sure to use the extension cable supplied with it. Otherwise, malfunction may result.
- If you connect the TV with your wireless router (or access point) at 5GHz, set [Wi-Fi Direct] to [Off]. Press the HOME button, then select [Settings] → [Network] → [Wi-Fi Direct] → [Off].

Notes

- The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those supplied with the router. Or contact the person who set up the network connection (network administrator).

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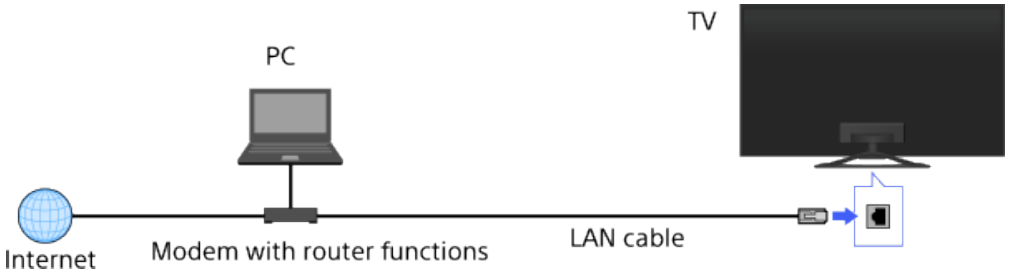
Wired connection (with a LAN cable)

Making a Connection

A wired LAN connection allows you to access the Internet and your home network. Connect a LAN cable to your TV.



Steps

1. Set up your LAN router.
   For details, refer to the instruction manual of your LAN router, or contact the person who set up the network connection (network administrator).
2. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

3. Select [Network] using the ←/→ buttons, then press the ⊕ button.

4. Select [Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Set up network connection] using the ↑/↓ buttons, then press the ⊕ button.

6. Select [Auto] using the ↑/↓ buttons, then press the ⊕ button.
7. Follow the on-screen instructions to complete the setup.
8. After completing the setup, select [Refresh Internet Content] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Notes

- The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those supplied with the router. Or contact the person who set up the network connection (network administrator).

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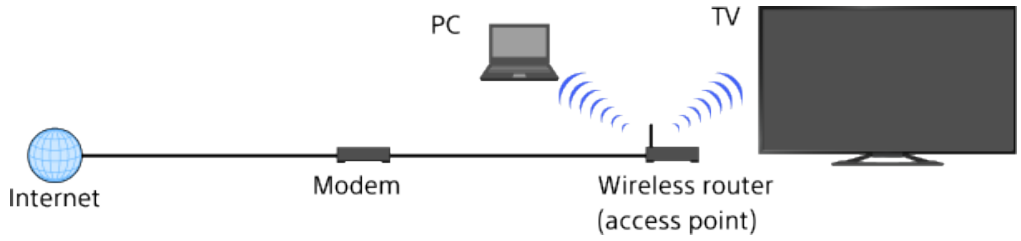
Setting IPv6

Making a Connection

If your provider's service is compatible with IPv6, you can connect this TV to the Internet by IPv6.

Example of wireless connection:



Steps

1. Make a broadband Internet connection.
   Press the ⊕ button to jump to the title list. Then, press the ⊕ button again to go to “Wireless connection” or “Wired connection” in “Connecting to the Internet” for details.
2. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

3. Select [Network] using the ←/→ buttons, then press the ⊕ button.

4. Select [IPv6 Setup] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Set up IPv6 connection] using the ↑/↓ buttons, then press the ⊕ button.

6. Follow the on-screen instructions to complete the setup.

To return to the last viewed source, press the HOME button twice.

Notes

- If [IPv4: Failed] appears at [Connection Results], press the HOME button, then select [Settings] → [Network] → [Network Setup], check the current network settings.
- If Internet services or websites are not compatible with IPv6, connect with IPv4.

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Browsing Websites

Overview

When the TV is connected to the Internet, you can browse websites.

Steps

1. Make a broadband Internet connection.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

4. Select [Internet Browser] using the ↑/↓/←/→ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button.

To enter a URL

Press the OPTIONS button, select [URL Entry], then enter a URL.

To change the character size

Press the OPTIONS button, select [Zoom], then the desired option.

Notes

- If the TV does not support the functions provided by certain Internet services (e.g. Adobe Flash Player, PDF viewer), web content may not be displayed correctly, or some functions may not work properly. Also, the TV may not support functions developed in the future.
- In no event shall Sony be liable for any damage caused or associated with the use of the Internet browser, malfunction (including software) or communication failure.

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Watching Internet Video

Overview

You can enjoy Internet video content, including movies and cartoons, by accessing a gateway that delivers a variety of on-demand entertainment.

Steps

1. Make a broadband Internet connection.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.
4. Select the desired service using the ↑/↓/←/→ buttons, then press the ⊕ button.
5. Select the desired content using the ↑/↓/←/→ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

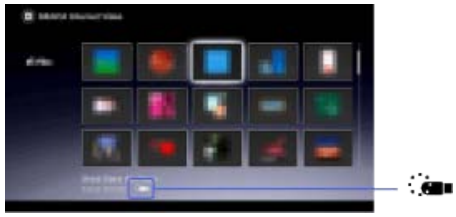
To seek forward/backward in video content

Press the buttons on the remote control that correspond with the control indications on the screen.

To avoid video/sound interruption

Depending on your network environment or the data size of content, video or sound interruption may occur.

The interruption can be avoided by temporarily storing the content on a USB device (not supplied), and you can enjoy smooth video playback. This function is available with services that are indicated by the icon when you select them.



Perform the following to use this function.

- USB device connection
  Connect a USB device that supports USB 2.0 or higher to the TV's USB port.
- USB device registration
  Press the HOME button, then select [Settings] → [Preferences] → [Register USB device].
  Note that a USB device will be formatted once registered, and all the stored data will be deleted.
  To deregister a USB device, select [Deregister USB device].

When you view content of an available service, connect a registered USB device to the TV's USB port. The content will be stored temporarily on the USB device should an interruption occur during playback.

This registered USB device does not appear in the list of devices connected to the TV.

To update Internet Video content services

Press the HOME button, then select [Settings] → [Network] → [Refresh Internet Content].

Tips

- Information about the highlighted icon appears in the information banner.
- The interface to Internet content depends on the Internet content providers.

Notes

- If you experience difficulties, check that the Internet connection is set up properly.

- Services block video content based on the [Parental Lock] setting of the TV. Some service providers do not support this function.

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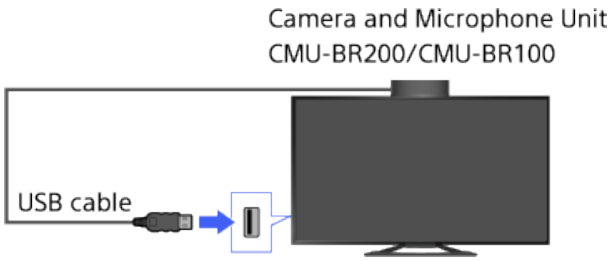
Performing initial setup

Making a Connection

Enjoy widescreen video calls by connecting the optional Camera and Microphone Unit CMU-BR200/CMU-BR100.

Attach the camera to the TV, then connect the USB cable to the TV’s USB port. For details on how to attach the camera, refer to the instruction manual supplied with the camera.



Steps

1. Make a broadband Internet connection.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

4. Select [Skype] using the ↑/↓/←/→ buttons, then press the ⊕ button.
5. Follow the on-screen instructions to create your account.

To return to the last viewed source, press the HOME button twice.

About the status icons in the Home Menu

When [Skype] in [Applications] of the Home Menu is selected, a status icon appears next to [Skype], indicating the status of your Skype account.

Each status icon indicates as follows:
: Auto Sign in error, : Online, : Away, : Do Not Disturb, : Invisible

Tips

- For more information on Skype, please visit http://www.Skype.com/
- This product includes SkypeKit 3.7 (c) 2003-2012, Skype Patents Pending Skype, associated trade marks and logos and the “S” logo are trade marks of Skype. Although this product has been tested and met our certification standards for audio and video quality, it is not endorsed by Skype, Skype Communications S.a.r.l. or any of their related companies.

Notes

- You can use only the optional Camera and Microphone Unit CMU-BR200/CMU-BR100. Other models are not supported.
- No emergency calls. Skype is not a replacement for your telephone and can’t be used for emergency calling.
- Skype may not be available while some other applications are being used.
- Use of a wireless network connection may cause audio/image degradation.
- Connect the optional Camera and Microphone Unit directly to the TV’s USB port. Do not connect it via a USB hub.
- Audio and video calls are free to other people on Skype. For other Skype services such as low cost calls to mobile phones and landlines, Skype Credit or a subscription is required.
- The sound quality of the microphone may deteriorate in a noisy environment.
-

A ringtone does not sound from the HDMI Audio Return Channel (ARC) and optical digital audio output. To sound a ringtone, press the HOME button, then select [Settings] → [Sound] → [Speakers] → [TV Speakers].

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Making a call

Overview

You can make free video and voice calls to friends and family anywhere in the world from the comfort of your living room. If you want to call a friend who is not on Skype, you could make great savings by calling them on their landline or mobile using Skype.

Steps

1. Make a broadband Internet connection.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

4. Select [Skype] using the ↑/↓/←/→ buttons, then press the ⊕ button.
5. Select [Contacts] or [History] using the ←/→ buttons.
   Select [Contacts] to use your Skype contact list. Select [History] to

use the call history list.

6. Select the contact or phone number to call using the ↑/↓ buttons, then press the ⊕ button.
7. Select (Video Call) or (Voice Call) using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

About the status icons in the contact list

A status icon is displayed next to your contacts, so you know if they are available to have a conversation.

The list below indicates their availability:
: Online, : Away, : Do Not Disturb, : Offline, : Offline (with call forwarding enabled), : Phone contact, : Offline (with voice mail enabled)

About the status icons in the call history list

The icons in the history list indicate the following:
: Missed call, : Incoming call, : Outgoing call, : Voice mail, : Authorization request

To call by entering a phone number

Press the HOME button, then select [Applications] → [All Applications] → [Skype] → [Tools] → [Call Phone Number]. Enter a phone number, then select [Call].

To add contacts to the contact list

You can add contacts in the following ways:

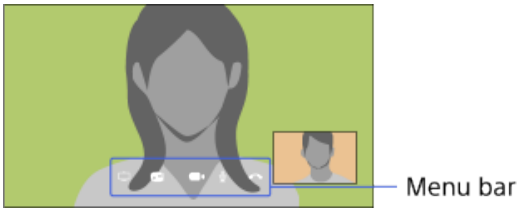
- Press the HOME button, select [Applications] →[All Applications] → [Skype] → [Tools] → [Find Contacts]. Enter a Skype name, full name or e-mail address, select [Search], the Skype name/full name to call, then select [Add to Contacts].
- From the call history list, select the contact or phone number, then [Add to Contacts].
- After entering a phone number, select [Save], then the desired option.

To receive a call

You can receive a call even while watching TV or using other applications.
When the illumination on the front of the TV blinks or the following screen notifies you of an incoming call, select (Video Call) or (Voice Call) to answer.
(While using another application, an incoming call notification is displayed using the full screen.)

To use call options during a call

Use the menu bar at the bottom of the screen.
When the other party is displayed in full screen, you can show/hide the menu bar by pressing the DISPLAY button.



Tips

- For the best audio quality during a Skype call, use the speakers that are built into the TV instead of using an external audio system. To use the TV speakers, press the OPTIONS button, then select [Speakers] → [TV Speakers].

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Current View Information Search

Overview

This feature searches for information about music title/artist playing with the content you are watching, from the data base on the Internet. Music playing on the device connected to the TV can also be searched.
You can search furthermore about the related information from search results.

Steps

1. Make a broadband Internet connection.
2. While a TV program, video file or music is playing, press the RELATED SEARCH button.
   Information related to music currently playing will appear.

3. To view more detailed information, select a search result using the ↑/↓ buttons, then press the ⊕ button.
   If a message appears displaying the number of search results at the bottom right of the screen, press the ⊕ button and follow the steps above.
4. Detailed information about music currently playing will appear.
   To view related detailed information, switch the tabs using the ←/→ buttons.

To operate the search result

Select [Action] in the [Details] tab using the ↑/↓ buttons, then press the ⊕ button. You can operate [Watch] or [Add to Bookmarks], etc. (What you can operate depends on condition.)

To search again

Press the OPTIONS button, then select [Reload] using the ↑/↓ buttons.

To display a bookmark

Press the OPTIONS button, then select [Video Bookmarks] or [Music Bookmarks] using the ↑/↓ buttons.

Notes

- Information may not be obtainable depending on what you watch.

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Keyword Search

Overview

You can search for information on TV programs, music, and videos by entering a keyword (track title, album name, video title, etc.). You can also search and play Internet video. The search target may differ depending on your region/country.

Steps

1. Make a broadband Internet connection.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

4. Select [Text Search] using the ↑/↓/←/→ buttons, then press the ⊕ button.
5. Select the text input area using the ↑/↓ buttons, then press the ⊕

button.

6. Select [New Keyword] using the ↑/↓ buttons, then press the ⊕ button.
7. Enter a keyword, then select [Enter] using the ↑/↓/←/→ buttons. The search result will be categorised by the type of content, then displayed. Select → to display all of search results for the selected type.
8. Select a search result using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the RETURN button a few times.

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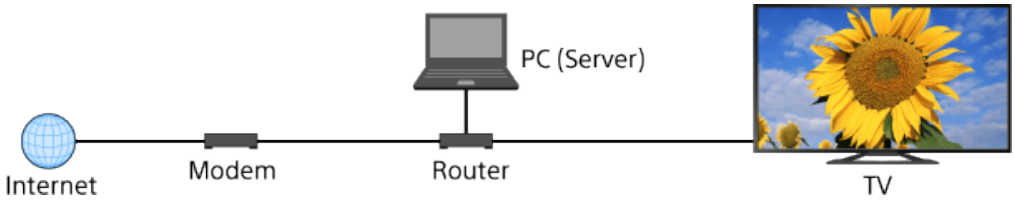
Playing Content on a PC

Overview

You can play photo/music/video files stored on a server (e.g. PC) that is connected to the same home network that the TV is connected to.



Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
   Press the ⊕ button to jump to the title list. Then, press the ⊕ button again to go to “Connecting to the Internet” for details.
2. Press the HOME button, then select [Applications] using the ↑/↓ buttons.

3. Select [All Applications] using the ←/→ buttons, then press the ⊕ button.

4. Select [Media Player] using the ↑/↓/←/→ buttons, then press the ⊕ button.
5. Select [Photo], [Music] or [Video] using the ↑/↓ buttons, then press the ⊕ button.

6. Select the server containing the file to play using the ↑/↓/←/→ buttons, then press the ⊕ button.
7. Select the folder or file from the list using the ↑/↓/←/→ buttons, then press the ⊕ button.
   If you select a folder, select the file using the ↑/↓/←/→ buttons, then press the ⊕ button.
   Playback starts.

To return to the last viewed source, press the HOME button twice.

To check the supported file formats

Codec List

Notes

- The server is required to be DLNA-certified (e.g. VAIO).
- Depending on the file, playback may not be possible even when using the supported formats.
- Only the panoramic JPEG files in the following horizontal/vertical sizes can be scrolled. (If the JPEG file is edited on a PC, etc., scroll may not be possible.)

  - For horizontal scroll: 4912/1080, 7152/1080, 3424/1920, 4912/1920, 12416/1856, 8192/1856, 5536/2160, 3872/2160, 10480/4096, 11520/1080

  - For vertical scroll: 1080/4912, 1080/7152, 1920/3424, 1920/4912, 1856/12416, 1856/8192, 2160/5536, 2160/3872, 4096/10480, 1080/11520
- [Face Zoom] and [Expanded] in the option menu of [Display Size] may not work for some image files.

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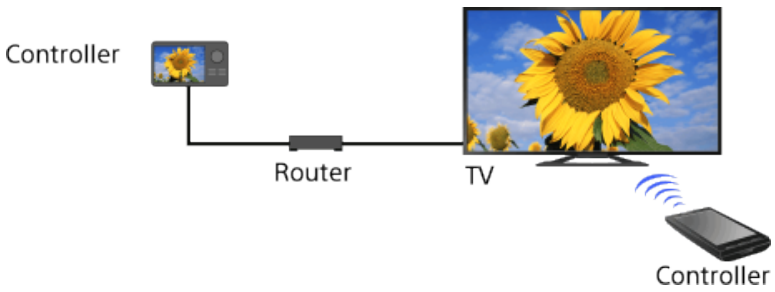
Enabling the renderer function

Overview

By enabling the renderer function, you can play photo/music/video files in a controller (e.g. digital still camera) on the TV screen by operating the device directly. Also, a mobile device (e.g. smartphone) can work as the TV’s remote control via the home network.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Network] using the ←/→ buttons, then press the ⊕ button.
3. Select [Home Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Remote Device / Renderer] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Remote Device / Renderer] using the ↑/↓ buttons, then press the ⊕ button.
6. Select [On] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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Allowing/blocking access from controller

Overview

You can allow or block access from a specified controller.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Network] using the ←/→ buttons, then press the ⊕ button.
3. Select [Home Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Remote Device / Renderer] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Renderer Access Control] using the ↑/↓ buttons, then press the ⊕ button.
6. Select the controller using the ↑/↓ buttons to change the access permission setting, then press the ⊕ button.
7. Select [Allow] or [Block] using the ↑/↓ buttons, then press the ⊕ button.
   Select [Allow] to allow access from the controller. Select [Block] to block access from the controller.

To return to the last viewed source, press the HOME button twice.

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Making advanced renderer settings

Overview

You can make advanced renderer settings.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Network] using the ←/→ buttons, then press the ⊕ button.
3. Select [Home Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Remote Device / Renderer] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Renderer Options] using the ↑/↓ buttons, then press the ⊕ button.
6. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Auto Access Permission]
Permits access to the TV automatically when a controller accesses the TV for the first time.

[Smart Select]
Responds to infrared signals sent from controllers.

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Selecting servers to display

Overview

Select servers to be displayed in the Home Menu. Up to 10 servers can be displayed in the Home Menu.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Network] using the ←/→ buttons, then press the ⊕ button.
3. Select [Home Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Show/Hide Media Servers] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the server to display or not display in the Home Menu using the ↑/↓ buttons, then press the ⊕ button.
6. Select [Shown] or [Hidden] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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Checking server connection

Overview

The TV checks if the server is being correctly recognized when you cannot connect it to your home network. If the diagnostic results indicate a failure, check possible causes, network connections and settings.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Network] using the ←/→ buttons, then press the ⊕ button.
3. Select [Home Network Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Media Server Troubleshooting] using the ↑/↓ buttons, then press the ⊕ button.
5. Follow the on-screen instructions to perform the diagnostics.

To return to the last viewed source, press the HOME button twice.

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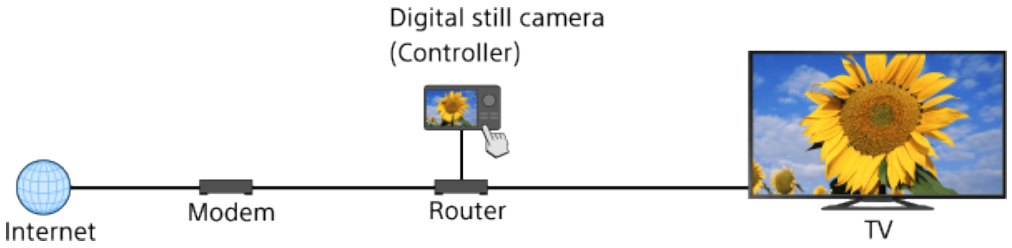
Playing Content with Renderer Function

Overview

You can play photo/music/video files in a controller (e.g. digital still camera) on the TV screen by operating the controller directly. The controller should also be renderer-compatible.



Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
   Press the ⊕ button to jump to the title list. Then, press the ⊕ button again to go to “Connecting to the Internet” for details.
2. Operate the controller to start playing the content on the TV screen.

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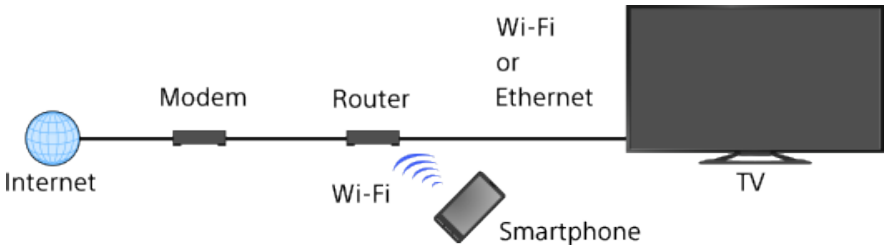
Using a Smartphone/Tablet as a Remote

Overview

You can control the TV using a mobile device with the “TV SideView” application installed. You can enjoy watching the TV with touch panel operation on a mobile device, such as a smartphone or tablet. To use your mobile device as a TV’s remote control, register it to the TV as a remote device. (Registration is required only for the first time.)



Available operations using the mobile device with the “TV SideView” application installed

- Powering on and controlling the TV as a remote control
- Entering text using the mobile device’s keyboard

Tips

- You can search and download the “TV SideView” application from:
  - Google Play (for Android OS-equipped phones)
  - App Store (for iPhones)

Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
   Press the ⊕ button to jump to the title list. Then, press the ⊕ button again to go to “Connecting to the Internet” for details.
2. Connect the mobile device to the home network that the TV is connected to.
3. Launch the “TV SideView” application on the mobile device, then

search for the TV in the home network.
The detected device list appears on the mobile device.

4. Select the TV in the detected device list, then perform the required operation on your device.

The mutual registration (above steps) are required only for the first time.

To turn on the TV when you launch the “TV SideView” on your mobile device

Press the HOME button, then select [Settings] → [Network] → [Home Network Setup] → [Remote Start] → [On].
The standby power consumption will increase if [On] is set.

Note that this function is not available if you create a wireless network connection by inserting the USB Wireless LAN Adapter UWA-BR100 into your TV’s USB port.

Notes

- Make sure that [Remote Device / Renderer] is set to [On]. To confirm the setting, press the HOME button, then select [Settings] → [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Remote Device / Renderer].
- The name and available functions of “TV SideView” are subject to change.

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Using Wi-Fi Direct Function

Overview

The TV can be connected directly with a Wi-Fi Direct/Wi-Fi compatible device (e.g. smartphone, PC) that also supports the “DLNA Push controller” function. Content such as photos/music/videos on the device can be played on the TV. No wireless router (or access point) is required to use this feature.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Network] using the ←/→ buttons, then press the ⊕ button.

3. Select [Wi-Fi Direct] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [On] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Wi-Fi Direct Settings] using the ↑/↓ buttons, then press the ⊕ button.
6. Select the TV name displayed on the TV screen with the Wi-Fi Direct

compatible device.
In the case of a Wi-Fi compatible device, press the OPTIONS button, then select [Manual].

7. Operate the Wi-Fi Direct/Wi-Fi compatible device to connect with the TV.
8. Send the content from the Wi-Fi Direct/Wi-Fi compatible device to the TV.
For details, refer to the instruction manual of the device.

If the connection does not succeed

When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Manual].
Select [WPS (Push Button)] if the device supports WPS. Otherwise, select [Other Methods] and follow the on-screen instructions to complete the setup.

To connect another device

Follow the steps above to connect devices. Up to 8 devices can be connected at the same time. To connect another device when 8 devices are already connected, disconnect an unnecessary device, then connect the device.

To change the name of the TV shown on the connected device

Press the HOME button, then select [Settings] → [Network] → [Device Name].

To list connected devices/deregister devices

When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Show Device List / Delete].

To deregister a device, select the device in the list to delete, then press the ⊕ button. Then, select [Yes] in the confirmation display.

To deregister all devices, press the OPTIONS button in the list, select [Delete All], then [Yes] in the confirmation display.

Icons on the left of the list show the following.

✓ (check icon): Connected devices

(display icon): Screen mirroring compatible devices

To display dialog when attempting to connect a device with the TV

Activating this function can avoid an unintended device from being connected.

When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Registration Notification].

Note that once you decline registration request from a device, you will not be able to connect the device unless you delete it from the device

list.

To connect the declined device, press the OPTIONS button, select [Show Device List / Delete], then delete the declined device. Then, make a new connection with the device.

Notes

- If the TV is connected with a wireless router (or access point) at 5GHz using the USB Wireless LAN Adapter;

  - 5GHz connection will be disconnected when [Wi-Fi Direct] is set to [On].

  - Connection will be resumed when [Wi-Fi Direct] is set to [Off].

- Connecting devices must conform to the following:

  - Wi-Fi Direct compatible devices: 2.4GHz connection (5GHz not supported).

  - Wi-Fi Direct unsupported devices: IEEE802.11 g/n, 2.4GHz connection (5GHz not supported).

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Using One-touch mirroring

Overview

If a One-touch Remote Control is not supplied with the TV, purchase the optional One-touch Remote Control to use this function.

“One-touch mirroring” is a function to achieve Screen mirroring by touching a One-touch mirroring compatible device (e.g. some models of Xperia) on the One-touch Remote Control. It is convenient that the Screen mirroring is achieved by a simple operation.

“Screen mirroring” is a function to display the screen of a mobile device on the TV by Miracast technology.

Steps

1. Set the NFC setting of the One-touch mirroring compatible device to on.
2. Touch the NFC detection area of the One-touch mirroring compatible device on the N mark on the rear of the One-touch Remote Control for about 2 seconds.
   Remove the device from the remote control when the device confirmation completion message appears at the bottom of the TV screen.When the device is connected with the TV, the screen displayed on the device will also be displayed on the TV.

To disconnect the device from the TV

Touch the device on the N mark on the rear of the One-touch Remote

Control as with step 2.

Notes

- For connection with Xperia, release the screen lock of Xperia, then touch.
- For the position of the NFC detection area on the One-touch mirroring compatible device, refer to the instruction manual of the compatible device.
- If the TV cannot recognize and connect with the compatible device, try touching a few times.

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Using Screen mirroring

Overview

“Screen mirroring” is a function to display the screen of a mobile device on the TV by Miracast technology.

The TV can be connected directly with a Screen mirroring compatible device (e.g. smartphone, PC). You can enjoy the display screen of the device on your large TV screen. No wireless router (or access point) is required to use this feature.

Steps

1. Press the INPUT button, then select [Screen mirroring] using the ↑/↓ buttons.
2. Operate the Screen mirroring compatible device to connect with the TV.
   When the device is connected with the TV, the screen displayed on the device will also be displayed on the TV.
   For details, refer to the instruction manual of the device.

To list connected devices/deregister devices

When the standby screen for the Screen mirroring is displayed, press the OPTIONS button, then select [Show Device List / Delete].

To deregister a device, select the device in the list to delete, then press the ⊕ button. Then, select [Yes] in the confirmation display.

To deregister all devices, press the OPTIONS button in the list, select [Delete All], then [Yes] in the confirmation display.

Icons on the left of the list show the following.
✓ (check icon): Connected devices
(display icon): Screen mirroring compatible devices

To display dialog when attempting to connect a device with the TV

Activating this function can avoid an unintended device from being connected.

When the standby screen for the Screen mirroring is displayed, press the OPTIONS button, then select [Registration Notification] → [On].

Note that once you decline registration request from a device, you will not be able to connect the device unless you delete it from the device list.

To connect the declined device, press the OPTIONS button, select [Show Device List / Delete], then delete the declined device. Then, make a new connection with the device.

Notes

- Connecting devices must conform to the following:

  - Screen mirroring compatible devices: 2.4GHz connection (5GHz not supported).

  - Miracast compatible devices: 2.4GHz connection (5GHz not supported).

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Selecting picture mode

Overview

You can select the picture mode according to your preference. The [Picture Mode] setting works in accordance with the [Scene Select] setting.

Steps

1. Set [Scene Select].
2. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

3. Select [Picture & Display] using the ←/→ buttons, then press the ⊕ button.

4. Select [Picture Adjustments] using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Picture Mode] using the ↑/↓ buttons, then press the ⊕ button.
6. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

See the following page(s) for available options. Note that the options change depending on the [Scene Select] setting. (e.g. If [Scene Select] is set to [General], the options in [Picture Mode] will be [Vivid], [Standard] and [Custom].)

To return to the last viewed source, press the HOME button twice.

Available Options

[Vivid]
Enhances picture contrast and sharpness.

[Standard]
Provides standard picture for basic home use.

[Custom]
Stores your preferred settings.

[Cinema 1]
Provides film-based content for a cinema-like environment.

[Cinema 2]
Provides film-based content for basic home use.

[Sports]
Optimizes picture quality for viewing sports.

[Game-Standard]
Provides standard pictures suitable for games.

[Game-Original]
Adjusts the game picture according to your preference.

[Graphics]
Optimizes picture quality for viewing graphics.

[Photo-Vivid]
Enhances contrast, sharpness, and color of photographs.

[Photo-Standard]
Optimizes picture quality for viewing photographs.

[Photo-Original]
Enhances the visual warmth of photographs.

[Photo-Custom]
Adjusts the detailed settings for viewing photographs and stores your preferred settings.

[Animation]
Optimizes picture quality for viewing animations.

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Locking picture adjustment

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.

3. Select [Picture Adjustments Lock] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Lock] using the ↑/↓ buttons to prevent the picture adjustments from being changed, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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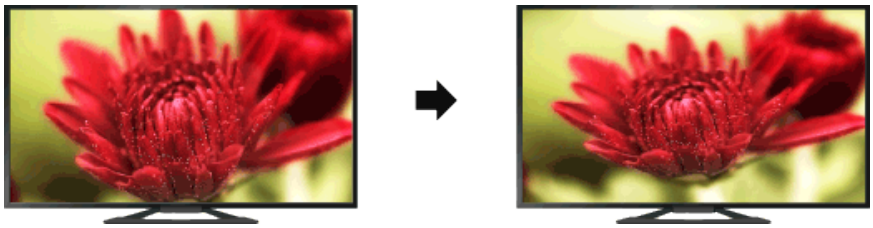
Setting screen size/position

Overview

You can set the screen size and position according to your preference.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Picture & Display] using the ←/→ buttons, then press the ⊕ button.

3. Select [Screen] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options (for inputs other than a PC)

[Setting Memory]

Applies custom screen settings to the current input or to common

memory shared by other inputs.

[Wide Mode]

[Wide Zoom]: Enlarges the picture, preserving the original picture as much as possible.
[Normal]: For 4:3 original source, displays a 4:3 picture in its original size, with side bars to fill the 16:9 screen. For 16:9 original source, displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.
[Full]: Enlarges the picture horizontally to fill the screen when the input signal is 4:3. When the input signal is 16:9 (High-definition source), select this option to display the 16:9 picture in its original size.
[Zoom]: Displays a 16:9 picture that has been converted into 4:3 letter box format, in the correct aspect ratio.
[14:9]: Displays the 14:9 picture in the correct proportion. As a result, side bars are shown on the screen. ([14:9] is available depending on your region/country.)
[Captions]: Enlarges the picture horizontally, while fitting captions in the screen.
If component input (480p) is selected and [Scene Select] is set to [Game] or [Graphics], the available options change to [Fine-Normal]/[Fine-Full]/[Portable Game 1]/[Portable Game 2].
[Fine-Normal]: Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.
[Fine-Full]: Stretches the 4:3 picture horizontally, to fill the 16:9 screen.
[Portable Game 1]: Stretches a black-framed game picture from PlayStation®Portable.
[Portable Game 2]: Stretches a black-framed picture (e.g. browser) from PlayStation®Portable.

[Auto Wide]

Automatically changes [Wide Mode] to match the input signal.

[4:3 Default]

Sets the default screen format for a 4:3 input signal.

[Auto Display Area]

Automatically adjusts the picture to the most appropriate display area.

[Display Area]

[Full Pixel]: Displays the original picture when parts of the picture are cut.
[+1]: Displays the picture using the TV’s maximum display area.
[Normal]: Displays the recommended size picture.
[-1]: Enlarges the picture.
([Full Pixel] is available only when the input signal is 1080i/1080p and [Wide Mode] is set to [Full].)

[Screen Position]

Adjusts the vertical position and horizontal position of the picture.

[Vertical Size]
Adjusts the vertical size of the picture.

Available Options (for PC input)

[Reset]
Resets all PC screen settings to factory settings.

[Wide Mode]
[Normal]: Displays the original picture.
[Full 1]: Enlarges the picture to fill the display area maintaining the original picture.
[Full 2]: Enlarges the picture to fill the display area.

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Adjusting various sound settings (e.g. bass/treble/balance)

Overview

You can adjust various sound setting of sound mode.

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.

3. Select [Sound Adjustments] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Setting Memory]

Applies custom sound settings to the current input or to common memory shared by other inputs.

[Sound Mode]

[Standard]: Optimizes sound quality for general content.
[Cinema]: Optimizes surround sound for movies.
[Sports]: Reproduces realistic sound, like that in a stadium.
[Music]: Lets you experience dynamic and clear sound, like that of a concert.
[Game]: Broadens your game-playing experience with superb sound quality.
[Compressed Audio]: Improves the sound quality of low bit rate compressed audio content.

[Surround Effect]

Adjusts the surround sound effect.
If [Sound Mode] is set to [Cinema], [Sports], [Music] or [Game], S-Force Front Surround technology reproduces a surround sound field.

[Sound Booster]

[On]: Enhances treble/bass and reproduces dynamic sound.
[Off]: Provides natural sound.

[Equalizer]

Adjusts the sound according to specific frequencies.

[Voice Zoom]

Emphasizes voice or ambient sounds.

[Sound Enhancer]

Recovers and enhances lost high frequencies and dynamic range of low bit rate compressed audio content.
[Low]: Enhance and recover high frequencies.
[Mid]: Add dynamic range recovery.
[High]: Add individual recovery for dialog and music.
[Simulated Stereo]: Adds a surround-like effect to monaural programs.

[Advanced Auto Volume]

Automatically compensates for the volume level that may vary by program or input.
[Off]: Turns off AVV.
[Normal]: Normal mode.
[Night]: Compresses dynamic range for a more consistent level for viewing at night.

[Volume Offset]

Adjusts the current volume level relative to other inputs, when [Setting Memory] is set to the current input.

[Balance]
Emphasizes sound from the left or right speaker.

[Reset]
Resets the selected input settings to the initial value.

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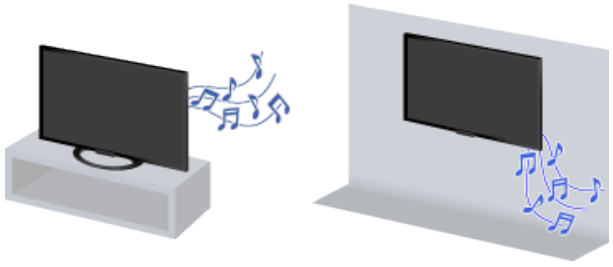
Setting sound according to TV position

Overview

You can create different sound images from the TV speakers according to how you position the TV.



Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.

2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.

3. Select [TV Position] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Table-Top Stand]

Provides the best sound quality when you place the TV on a TV stand.

[Wall Mount]

Provides the best sound quality when you hang the TV on a wall.

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Checking signal information

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Product Support] using the ←/→ buttons, then press the ⊕ button.
3. Select [Signal Diagnostics] using the ↑/↓ buttons to display the diagnostics information, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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Selecting the cable/antenna signal

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Cable/Antenna] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Cable] or [Antenna] using the ↑/↓ buttons to set the received signal, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

Tips

- After changing this setting, it is recommended to run [Auto Program].

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Tuning channels automatically

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Auto Program] using the ↑/↓ buttons, then press the ⊕ button.
4. Follow the on-screen instructions to tune in all available channels and store their settings in the TV.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

Tips

- You can run [Auto Program] after moving to a new residence, changing service providers, or to search for newly launched channels.

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Adding digital channels

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Add Digital Channels] using the ↑/↓ buttons, then press the ⊕ button.
4. Follow the on-screen instructions to add digital channels.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

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Setting channels to surf with CH +/- buttons

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Show/Hide Channels] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired channel using the ↑/↓ buttons, then press the ⊕ button.
5. Select [Shown] or [Hidden] using the ↑/↓ buttons, then press the ⊕ button.
   Select [Shown] to select with the CH +/- buttons. Select [Hidden] to not select with the CH +/- buttons.
6. Repeat steps 4 and 5 to set other channels.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

Tips

- The [Show/Hide Channels] settings are applied also in the channel list of [TV Channel List] under [TV] in the Home Menu.

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Editing channel labels

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Edit Channel Labels] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired channel using the ↑/↓ buttons, then press the ⊕ button.
5. Enter the new name, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

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Fine adjusting analog channels

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Analog Channel Adjustment] using the ↑/↓ buttons, then press the ⊕ button.
4. Press the ⊕ button in [Channel], select the channel to adjust using the ↑/↓ buttons, then press the ⊕ button.
5. Press the ⊕ button in [Fine Tune], select the [Auto] or [Custom] using the ↑/↓ buttons, then press the ⊕ button.
   When selecting [Custom], press the ↓ button, then press the ⊕ button to change the frequency. Adjust the frequency using the ←/→ buttons, then press the ⊕ button.
6. Press the RETURN button, select [Audio Filter] using the ↑/↓ buttons, then press the ⊕ button.
7. Select [High], [Low] or [Off] using the ↑/↓ buttons to set the audio quality, then press the ⊕ button.

* Option name differs depending on your region/country.

To return to the last viewed source, press the HOME button twice.

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Setting the information banner

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Info Banner] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Tips

- This setting does not affect the operation of the DISPLAY button, which displays full information about the currently viewed content.

Available Options

[Small]
Shows the current channel number or input name.

[Medium]
Shows the current channel number and program information.

[Large]
Shows the current channel number and detailed program information.

Notes

- Available options may differ depending on your region/country.

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Setting closed captions

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Closed Captions (CC)] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[CC Display]
Displays [Closed Captions (CC)]. Select [On when Muting] to automatically display closed captions when the TV is muted.

[Analog CC]
Sets the basic analog closed caption options.

[Digital CC]
Sets the digital closed caption options.

[Display Options]
Customizes the closed caption appearance.

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Turning off the key tone of remote control operations

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Key Tone] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Off] using the ↑/↓ buttons, then press the ⊕ button.

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Turning off start-up logo

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Startup Logo] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Off] using the ↑/↓ buttons to not display the logo when you turn on the TV, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

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Turning on/off and adjusting the brightness of the illumination

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Front Panel Illumination] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Illumination LED] using the ↑/↓ buttons, then press the ⊕ button.
5. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.
   See the following page(s) for available options.

To return to the last viewed source, press the HOME button twice.

Available Options

[Demo Mode]
The lamp blinks all the time the TV power is on.

[Auto Brightness Adjust]
Optimize brightness according to ambient light.

[Dark]
Lowers the brightness of the lamp.

[Simple Response]
Illumination lights in response to operations. It will not stay lit, even if you set the timer, timer rec* or reminder*.
* This function is available depending on your region/country.

[Off]
The lamp does not light under normal use.

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Setting menu language

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Language] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired language using the ↑/↓ buttons, then press the ⊕ button.

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Setting your region

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Region] using the ↑/↓ buttons, then press the ⊕ button.
4. Select your location using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Tips

- By setting your location, you can receive services from Internet content providers.

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Setting One-touch Remote Control

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [One-touch Remote Control Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Register] using the ←/→ buttons, then press the ⊕ button.
5. Press the COLOR KEY and HOME buttons on the One-touch Remote Control at the same time.
   After completing this process, the One-touch Remote Control can be used.

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Setting Bluetooth Device

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Bluetooth Settings]* using the ↑/↓ buttons, then press the ⊕ button.
4. Follow the on-screen instructions to complete the setup.

To return to the last viewed source, press the HOME button twice.

* This option is available depending on your model/region/country.

Notes

- Only a Bluetooth mouse can be registered to the TV. And you can register up to 3 type mouses.
- Pointer operation of the Bluetooth mouse can be performed only on an internet browser.

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Selecting speakers to output sound

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Speakers] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [TV Speakers] or [Audio System] using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Notes

- To use multi-channel audio, connect to an external audio system compatible with Dolby Digital using an optical cable, and select [Audio System].
- [Audio System] must be selected to listen to 5.1 multi-channel audio.

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Outputting sound from headphones

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Headphone/Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Headphone] using the ↑/↓ buttons, then press the ⊕ button.

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Controlling the volume of an audio system with the TV’s remote control

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Headphone/Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
5. In the sound setting menu, select [Audio Out] using the ↑/↓ buttons, then press the ⊕ button.
6. Select [Fixed] or [Variable] using the ↑/↓ buttons, then press the ⊕ button.
   Select [Fixed] to adjust the volume using the connected audio system’s remote control. Select [Variable] to adjust the volume with the TV’s remote control when using an external audio system.

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Setting headphone speaker link

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Sound] using the ←/→ buttons, then press the ⊕ button.
3. Select [Headphone Speaker Link] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [Speakers Off] or [Speakers On] using the ↑/↓ buttons, then press the ⊕ button.
   Select [Speakers Off] to not output sound from the TV’s internal speakers when you connect headphones to the TV. Select [Speakers On] to output sound from both the TV’s internal speakers and headphones.

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Managing external inputs

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Manage Inputs] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the input using the ↑/↓ buttons to assign an icon or name, then press the ⊕ button.
5. Select [Auto] or [Always] using the ↑/↓ buttons, then press the → button
   Select [Auto] to display icons or names only when the device is connected, or [Always] to display regardless of connection status.
6. Select the device name using the ↑/↓ buttons, then press the ⊕ button.
   Select [Edit] to enter your preferred name. After entering the name, press the → button, select the icon using the ↑/↓ buttons, then press the ⊕ button.

* Option name differs depending on your region/country.

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Switching the video input

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* using the ←/→ buttons, then press the ⊕ button.
3. Select [Video 2/Component Selection] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

* Option name differs depending on your region/country.

Available Options

[Auto]
Automatically switches the input to either [Component] or [Video 2] by detecting the terminal connection.

[Component]
Switches to component video input.

[Video 2]
Switches to composite video input.

Notes

- You cannot use [Component] and [Video 2] at the same time.

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Making detailed settings of video input

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Picture & Display] using the ←/→ buttons, then press the ⊕ button.
3. Select [Pro Picture Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Select the desired option using the ↑/↓ buttons, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Available Options

[Video Color Space (x.v.Color)]

Adjusts the color space of the original video to an image quality appropriate for the source.
[x.v.Color]: This is a video color space that supports the xvYCC international standards and enables a wider color gamut for vivid representation of colors in the natural world, such as the brilliant hues of flowers and the wide array of beautiful ocean hues.

[Photo Color Space]

Adjusts the color space of a still picture to an image quality appropriate for the source.
[sRGB]: A still image color space specified before Exif version 2.1; sRGB is an international standard with a narrower color reproduction gamut than Adobe RGB and sYCC.
[sYCC]: A still image color space specified after Exif version 2.2; sYCC is an international standard that covers nearly all visible colors while maintaining compatibility with sRGB color space.
[Adobe RGB]: A still image color space specified in Exif version 2.21; Adobe RGB is an international standard that covers the color gamut for printing devices.

[Color Matrix]

Reproduces the color-difference signals. It is recommended to leave this at the factory default setting.

[Dynamic Range]

Produces natural picture by changing the tone reproduction of input signals. For standard use of HDMI input, [Auto] is recommended as this changes the tone reproduction automatically. For Screen mirroring input, [Limited] is recommended. Select [Full] if black/white colors appear smeared.

[SBM]

Creates gradations using Super Bit Mapping technology.

[Color System]

Sets the color system according to the signal from the input source.

Notes

- [Video Color Space (x.v.Color)], [Photo Color Space] and [Color System] are available depending on your TV model/region/country.

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Running initial setup

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Preferences] using the ←/→ buttons, then press the ⊕ button.
3. Select [Initial Setup] using the ↑/↓ buttons, then press the ⊕ button.
4. Follow the on-screen instructions to run the initial setup that appeared when you first connected the TV.

To return to the last viewed source, press the HOME button twice.

Tips

- This setting is useful when you change the settings after moving to a new residence, or when you search for newly launched channels.

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Checking Sony contact information

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Product Support] using the ←/→ buttons, then press the ⊕ button.
3. Select [Contact Sony] using the ↑/↓ buttons, then press the ⊕ button.

   Sony contact information is displayed for your convenience. The TV-specific information such as serial number and software versions, are also displayed.

To return to the last viewed source, press the HOME button twice.

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Uploading operation history

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Product Support] using the ←/→ buttons, then press the ⊕ button.
3. Select [Upload History Log] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [On] using the ↑/↓ buttons to automatically upload your TV’s operation history, then press the ⊕ button.

To return to the last viewed source, press the HOME button twice.

Tips

- The uploaded information will be used as feedback for software quality check, feature improvement and feature enhancement.

Notes

- No personal information will be uploaded.
- This feature may not be available in some regions/countries.

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Updating broadcast/service software

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Product Support] using the ←/→ buttons, then press the ⊕ button.
3. Select [Automatic Software Download] using the ↑/↓ buttons, then press the ⊕ button.
4. Select [On] using the ↑/↓ buttons, then press the ⊕ button.
   After the download is complete, a confirmation message about starting an update appears when you turn on the TV.

To return to the last viewed source, press the HOME button twice.

Notes

- The software is downloaded when the TV is in standby mode.

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Updating TV's software

Steps

1. Press the HOME button, then select [Settings] using the ↑/↓ buttons.
2. Select [Product Support] using the ←/→ buttons, then press the ⊕ button.
3. Select [Software Update] using the ↑/↓ buttons, then press the ⊕ button.
   A confirmation message about starting an update appears. If no software has been downloaded, the TV will start searching for an update via the Internet (if connected).

To return to the last viewed source, press the HOME button twice.

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Power Symptoms

- TV turns off automatically.
- TV turns on automatically.

TV turns off automatically.

- Check if [Sleep Timer] is activated.
- Check if [Idle TV Standby] in [Eco] is activated.
- Check if [Auto Shut-off] in [Eco] is activated.

TV turns on automatically.

- Check if [Timer] is activated.

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Picture/Screen Symptoms

- Tiny black points and/or bright points appear on the screen.
- Picture quality is not as good as viewed at the store.
- Distorted picture.
- The screen flickers.
- No color/Dark picture/color is not correct/Picture is too bright
- Blurry picture or poor color.
- There is lag between video and sound.
- Screen format/wide mode changes automatically.
- Suddenly the picture becomes small.
- Black box on screen.
- Black bands appear at the edges of the screen.
- TV screen feels warm.
- Demonstration mode appears in the screen.

Tiny black points and/or bright points appear on the screen.

- The screen is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.

Picture quality is not as good as viewed at the store.

- Picture quality depends on the signal content. See the specifications to display the best possible picture for that signal.

Distorted picture.

- Check the antenna/cable connection.

- Keep the antenna/cable away from other connecting cables.
- When installing optional device, leave some space between the device and TV.
- Set [Motionflow] to [Standard] or [Off]. (For [Motionflow] compatible models only.)
- Change the current setting of [CineMotion] to another setting.
- Set [LNA] to [Off] to improve picture reception. ([LNA] may not be available depending on the situation/region/country.)
- Perform [Fine Tune]/[AFT] to improve picture for analog reception.
- Keep the TV away from noise sources such as mobile phones, cars, motorcycles, or hair-dryers, Wi-Fi units, or optical device.
- Make sure that the antenna is connected using a 75-ohm coaxial cable.

The screen flickers.

- Set [Motionflow] to other than [Impulse] (e.g. [Standard]).

No color/Dark picture/color is not correct/Picture is too bright

- Press the OPTIONS button, then select [Picture Adjustments] to make adjustments.
- Select [Reset] in [Picture Adjustments].
- If you set [Power Saving] to [Low] or [High], black level will be enhanced.

Blurry picture or poor color.

- Transporting the TV from a cold to a warm location or a sudden change in room temperature may cause moisture condensation, resulting in a blurry picture or poor color. Turn off your TV and wait a few hours before powering on again.

There is lag between video and sound.

- When enjoying Karaoke from a connected device, set [Scene Select] to [Game].

Screen format/wide mode changes automatically.

- When changing the channel or video input, if [Auto Wide] in [Screen] is set to [On], the current [Wide Mode] setting is automatically changed according to the input signal. To lock in [Wide Mode] selected with the

WIDE button on the remote control, set [Auto Wide] to [Off].

- Check the [Auto Wide] setting in [Screen].

Suddenly the picture becomes small.

- The picture becomes smaller during commercials due to the method used by a provider to broadcast content. When HD content channels switch to SD content (commercials), the picture may be small with a black border.
- [Auto Wide] will not expand the picture while the content switches, since the content information is regulated by the channel signal provider. You can manually change the [Wide Mode] setting if desired, which will remain in effect until you change the channel/input or manually change the [Wide Mode] setting again.

Black box on screen.

- A text option is selected although no text is available. To deactivate this feature, set [CC Display] to [Off]. If you are trying to select closed captioning, select [CC1] instead of [Text1] - [Text4] (options may not be available depending on your region/country).

Black bands appear at the edges of the screen.

- Some wide screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider).
- Programs in 4:3 aspect ratio will have bands on the left and right sides of the screen.
- Programs broadcasted in HD formats (720p and 1080i) with 4:3 content will commonly have black bands on the left and right sides of the screen which are added by the broadcaster.
- [Auto Wide] will not expand the picture when the black bands on the sides of the screen are added by the broadcaster. You can manually set [Wide Mode] to [Wide Zoom] or [Zoom], which will remain in effect until you change the channel/input or manually change the [Wide Mode] setting again.
- Some cable and satellite set-top boxes can also control the size of the picture. If you are using a set-top box, refer to the manufacturer of the set-box for more information.

TV screen feels warm.

- Due to the thin profile of this television, the heat generated by the LCD panel backlight and supporting electronics will be more noticeable. This is normal operation and not a cause for concern.

Demonstration mode appears in the screen.

- Press the OPTIONS button on remote control and select [Suspend Demo Mode]. Then, press the HOME button on the remote control and proceed with the [Initial Setup] from the [Settings] - [Preferences] menu. Be sure to select [Home] from the [Viewing Environment] step.

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Broadcast Reception Symptoms

- Ghosting or double images appear.
- Only snow noise or black picture appears on the screen.
- There is picture or sound noise when viewing a TV channel.
- You cannot receive any channels.
- You cannot receive or select channels.
- Some digital cable channels are not displayed.
- Broadcast HD formats have poor quality.
- Noisy picture.
- Some channels are blank.
- You cannot view digital channels.

Ghosting or double images appear.

- Check cable or antenna connections.
- Check the antenna location and direction.
- Set [Motionflow] to [Standard] or [Off]. (For [Motionflow] compatible models only.)

Only snow noise or black picture appears on the screen.

- Check if auto tuning is performed.
- Check if the antenna is broken or bent.
- Check if the antenna has reached the end of its serviceable life (3-5 years for normal use, 1-2 years at a seaside location).

There is picture or sound noise when viewing a TV channel.

- Perform [Fine Tune]/[AFT] to obtain better picture reception. (Option name differs depending on your region/country.)
- Set [Audio Filter] to [Off], [Low] or [High] to improve sound for analog reception. ([Audio Filter] may not be available depending on your region/country.)
- Set [LNA] to [Off] to improve picture reception. ([LNA] may not be available depending on the situation/region/country.)

You cannot receive any channels.

- Check the antenna/cable connection.
- Make sure the [Cable/Antenna] setting is correct for your TV signal source.
- If using CATV STB, refer to its instruction manual for installation.

You cannot receive or select channels.

- Perform [Auto Program] to add receivable channels that are not present in the TV’s memory.
- To receive or select cable channels, make sure that signal type in the channel settings is set to [Cable].
- To receive or select channels by antenna, make sure signal type is set to [Antenna].

Some digital cable channels are not displayed.

- Certain cable companies have limitations on the broadcast of digital cable channels. Check with your cable company for more information.
- The digital cable channel may be set to [Hidden] in [Show/Hide Channels].

Broadcast HD formats have poor quality.

- Content and signal quality are regulated by the signal provider. Many HD channels and content are actually upscaled versions of standard-definition broadcasts. The picture is affected by the quality of the signal received, which varies between channel and program.

Noisy picture.

- Make sure that the antenna is connected using a 75-ohm coaxial cable.
- Keep the antenna cable away from other connecting cables.
- To avoid TV interference, make sure to use an undamaged antenna cable.

Some channels are blank.

- The channel is for scrambled/subscription service only. Subscribe to a pay TV service.
- The channel is used only for data (no picture or sound).
- Contact the broadcaster for transmission details.

You cannot view digital channels.

- Ask a local installer if digital transmissions are provided in your area.
- Upgrade to a higher gain antenna.

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3D Picture/Glasses Symptoms

- 3D pictures are not displayed. 3D effect is weak.
- Black bars appear on both sides of the screen when watching 3D pictures.
- 3D display automatically switches on when 3D signal is detected.
- The message [3D signal has been detected] automatically appears when 3D signal is detected.

3D pictures are not displayed. 3D effect is weak.

- If two pictures are displayed side-by-side, press the 3D button repeatedly until [3D (Side-by-Side)] appears. If two pictures are displayed one above the other, press the 3D button repeatedly until [3D (Over-Under)] appears.
- If the [3D Display] screen appears and 3D pictures are not displayed, turn off the device that plays 3D content and turn it on again.
- Perceived 3D effect may vary from person to person.
- 3D effect may be less pronounced and the display color will be shifted if you lie down or tilt your head.

Black bars appear on both sides of the screen when watching 3D pictures.

- Black bars appear on both sides of the screen in order to process 3D signals for the simulated 3D display mode or when adjusting the depth of 3D pictures in [3D Depth Adjustment].

3D display automatically switches on when 3D signal is detected.

- Set to manually turn the 3D display on or off. Press the HOME button, then select [Settings] → [Picture & Display] → [3D Settings] → [Auto 3D] → [Off].

The message [3D signal has been detected] automatically appears when 3D signal is detected.

- Deactivate the [3D Signal Notification] setting. Press the HOME button, then select [Settings] → [Picture & Display] → [3D Settings] → [3D Signal Notification] → [Off].

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Sound Symptoms

- No sound but good picture.
- Audio noise.
- No audio or low audio with home theater system.
- Distorted sound.

No sound but good picture.

- Check the volume control.
- Press MUTING or VOL + button to cancel muting.
- Set [Speakers] to [TV Speakers] in the [Sound] setting. If it is set to [Audio System], TV speakers do not output sound regardless of the TV’s volume control.
- When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not provide an audio signal.

Audio noise.

- Make sure that the antenna is connected using a 75-ohm coaxial cable.
- Keep the antenna cable away from other connecting cables.
- To avoid TV interference, make sure to use an undamaged antenna cable.

No audio or low audio with home theater system.

- Set [Speakers] to [Audio System] in the [Sound] setting.
- Set [Audio Out] to [Fixed] in the [Sound] setting.

Distorted sound.

- Check the antenna/cable connection.
- Keep the antenna/cable away from other connecting cables.
-

Keep the TV away from electrical noise sources such as cars, hair-dryers, Wi-Fi units, mobile phones, or optical device.

- When installing optional device, leave some space between the device and TV.
- Perform [Fine Tune]/[AFT] to improve sound for analog reception.
- Set [Audio Filter] to [Low] or [High] to improve sound for analog reception. ([Audio Filter] may not be available depending on your region/country.)

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Connected Device Symptoms

- No picture from connected device.
- You cannot select connected device in the Home Menu.
- Some input sources cannot be selected.
- Certain programs on digital sources display a loss of detail.
- Photo images appear small on the screen.
- Photo images or folders take time to display.
- You cannot find a connected “BRAVIA” Sync HDMI device.
- You cannot control a second AV receiver.
- The TV does not output picture and/or sound from the MHL device.

No picture from connected device.

- Turn the connected device on.
- Check the cable connection between the device and TV.
- Press the INPUT button to display the list of inputs, then select the desired input.
- Correctly insert the USB device.
- Make sure that the USB device has been properly formatted.
- Operation is not guaranteed for all USB devices. Also, operations differ depending on the USB device features or the video files being played.

You cannot select connected device in the Home Menu.

- Check the cable connection.

Some input sources cannot be selected.

- Select [Manage Inputs] and confirm the [Always] setting for the input

sources.

Certain programs on digital sources display a loss of detail.

- Less detail than usual or artifacts (small blocks, dots or pixelation) may appear on the screen, due to the digital compression of the source content used by certain digital broadcasts and DVDs. The degree of visible artifacts depends on the clarity and resolution of the TV.

Photo images appear small on the screen.

- Photo images may not be displayed in full screen depending on the resolution or aspect ratio of the file.

Photo images or folders take time to display.

- Depending on the image dimension, file size, and number of files in a folder, some photo images or folders take time to display.
- The first time a USB device is connected to the TV via USB cable, it may take up to a couple of minutes for the photos to display.

You cannot find a connected “BRAVIA” Sync HDMI device.

- Check that your device is “BRAVIA” Sync-compatible.
- Make sure that [Control for HDMI] is set up on “BRAVIA” Sync-compatible device and [BRAVIA Sync Control] is set up on the TV.

You cannot control a second AV receiver.

- Only one “BRAVIA” Sync-compatible AV receiver can be used.

The TV does not output picture and/or sound from the MHL device.

- Disconnect the MHL cable, then reconnect it. Or turn the MHL device off, then turn on again and release the screen lock of the device.

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Network/Application Symptoms

- Sometimes video streaming quality is poor when using the wireless LAN.
- Wireless LAN connection fails or radio reception conditions are poor.
- The TV cannot connect with your wireless router (or access point) at 5GHz.
- Poor picture on Internet Video.
- Small picture on Internet Video.
- Certain Internet video content displays a loss of detail.
- Good picture quality but no sound on Internet video content.
- You do not see many videos in the Internet Video Guide.
- Apps are inaccessible.
- Serious Error 5006 Contact Sony appears when trying to perform [Refresh Internet Content].
- Some applications in [Applications] are not available./Disappeared from [All Applications].
- The TV cannot access the Internet when IPv6 is set.

Sometimes video streaming quality is poor when using the wireless LAN.

- The wireless network connection quality varies depending on the distance or obstacles (e.g. wall) between the TV/USB Wireless LAN Adapter and the wireless router (access point), environment interference, and quality of the wireless router (access point). If using USB Wireless LAN Adapter, it is suggested to use a wireless router (access point) supporting 5GHz operation for video streaming and place it closer to the USB Wireless LAN Adapter (not applicable for models with built-in wireless LAN device).
- Built-in wireless LAN TV uses the same 2.4GHz bandwidth as Bluetooth devices, therefore there may be rare occasions when communication

speed by Wi-Fi may deteriorate if Bluetooth applications (e.g. mouse/3D Glasses, etc.) are used at the same time. In this case, use a wired connection for the Internet, or connect with a USB Wireless LAN Adapter at 5GHz.

Wireless LAN connection fails or radio reception conditions are poor.

- Check the installation location of the TV and wireless router (access point). Signal condition may be affected for the following reasons.

  - Other wireless devices, microwaves, fluorescent lights, etc., are placed nearby.

  - There are floors or walls between the wireless router (access point) and TV.

  If the problem persists even after checking the above, try making a wired LAN connection.
- When using a USB Wireless LAN Adapter, move it to avoid signal interference by using an extension cable with base unit (optional accessory).

The TV cannot connect with your wireless router (or access point) at 5GHz.

- Use the optional USB Wireless LAN Adapter to connect with your wireless router (or access point) at 5GHz. Then, set [Wi-Fi Direct] to [Off]. Press the HOME button, then select [Settings] → [Network] → [Wi-Fi Direct] → [Off].

Poor picture on Internet Video.

- Quality depends on the original video provided by the video content provider and your connection bandwidth.

Small picture on Internet Video.

- Use the color buttons to zoom in and out.

Certain Internet video content displays a loss of detail.

- Video quality and picture size depend on broadband speed and delivery by content providers.

Good picture quality but no sound on Internet video content.

- Quality depends on the original content provided by the video content provider and your connection bandwidth.
- Due to the nature of Internet video, not all videos will contain sound.

You do not see many videos in the Internet Video Guide.

- Press the OPTIONS button, then select categories to view more content.
- Check the [Parental Lock] ratings on the TV; some Internet content may be blocked based on the rating.

Apps are inaccessible.

- Check that the LAN cable or AC power cord of the router/modem* has been connected properly.
  * Your router/modem must be set in advance to connect to the Internet. Contact your Internet service provider for router/modem settings.
- Try using apps later. The app content provider’s server may be out of service.

Serious Error 5006 Contact Sony appears when trying to perform [Refresh Internet Content].

- This error may occur if [Refresh Internet Content] did not complete successfully. Use the following steps, re-checking the Internet content status after completing each step:

1. Perform [Refresh Internet Content].
   Press the HOME button, then select [Settings] → [Network] → [Refresh Internet Content].
2. If the problem still exists, perform step 1 again.
3. If the problem persists, troubleshoot the Internet connection via the following:
   - Check that an active Internet connection exists with a wired router, wireless bridge, or wireless gaming adapter.
   - Reset the network equipment, such as cable modem, wired/wireless router, by powering off and on, then attempt step 1 again.
   - If the problem continues, wait a while and try step 1 again.
   - Confirm the Internet speed meets the minimum recommended

specification of 2.5 Mbps for standard definition (SD) content and 10 Mbps for High Definition (HD) content.
- Test the quality of service of your LAN connection by checking ping, jitter and packet loss. (Ping should be under 30ms, jitter should be less than 3ms, and packet loss should be 0.)

Some applications in [Applications] are not available./Disappeared from [All Applications].

- Reset the TV to restore the TV to the factory setting. Applications will be displayed again in [All Applications].
  To reset the TV, refer to “Troubleshooting” in the paper manual supplied with this TV.

The TV cannot access the Internet when IPv6 is set.

- IPv6 may not be available, in which case set IPv6 to off. Press the HOME button, then select [Settings] → [Network] → [IPv6 Setup] → [Set up IPv6 connection] → [No].

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Home Network Symptoms

- Your TV cannot connect to the server.
- A message appears stating that the TV cannot connect to your network.
- Server is inaccessible.
- Some media files in the USB device or server are not displayed.
- When using the renderer function, music files cannot be played back.

Your TV cannot connect to the server.

- Check the LAN cable or wireless connection to your server and your TV.
- Check if your network is properly configured on your TV.

A message appears stating that the TV cannot connect to your network.

- Check the current network settings. Press the HOME button, then select [Settings] → [Network] → [Network Setup] → [View Network settings and status]. Check your network connections and/or server’s instruction manual for connection information, or contact the person who set up the network connection (network administrator).
- Reconfigure your network settings by pressing the HOME button, then select [Settings] → [Network] → [Network Setup].
- If the LAN cable is connected to an active server and the TV has acquired an IP address, check your server’s connections and configurations. Press the HOME button, then select [Settings] → [Network] → [Network Setup] → [View Network settings and status].

Server is inaccessible.

- Check your LAN cable/wireless connection or your server connections. The TV may have lost connection with the server.
- Perform [Media Server Troubleshooting] to check if your media server is

properly communicating with the TV. Press the HOME button, then select [Settings] → [Network] → [Home Network Setup] → [Media Server Troubleshooting].

Some media files in the USB device or server are not displayed.

- Unsupported files may not be displayed.
- The accessible file or folder limit in a directory is 1,000 for USB and 30,000 for a server. This limit includes non-supported files or just folders. Files or folders are populated based on their timestamps. Photo, music files or folders exceeding the limit will not be displayed.

When using the renderer function, music files cannot be played back.

- Some applications display a photo file pre-installed in the PC simultaneously with music playback when using the renderer function. Depending on the pre-installed photo file, music playback may not be possible, but may become possible by changing the photo file.

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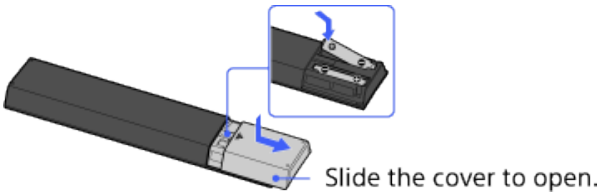
Remote Control Symptoms

- Remote control does not operate.

Remote control does not operate.

- Press a button on the TV to determine if the problem is with the remote control or not.
- Check the polarity of the batteries or replace the batteries.



- Point the remote control at the remote control sensor located at the front of the TV.
- Keep the remote control sensor area clear from obstacles.
- Fluorescent light can interfere with remote control operation; try turning off any fluorescent light.

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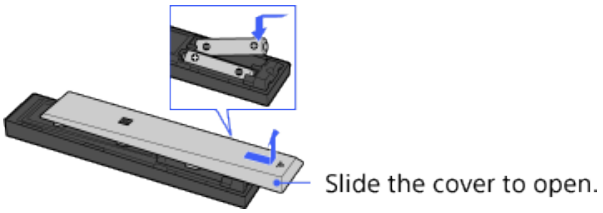
One-touch Remote Control Symptoms

- One-touch Remote Control does not operate, or does not operate properly.
- Batteries drain quickly.

One-touch Remote Control does not operate, or does not operate properly.

- Replace the batteries.



- Re-register the One-touch Remote Control.
- The One-touch Remote Control uses 2.4GHz bandwidth, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference.
  If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or One-touch Remote Control may not work on a metal rack due to wireless communication interference.
- Do not cover the upper part of the One-touch Remote Control with your hand when operating the TV.
- The One-touch Remote Control can control only the last registered TV.
- Only one One-touch Remote Control can be registered to the TV.
- It is recommended to use the One-touch Remote Control within 7 m (23 ft.) of the TV.
- If the ↑/↓/←/→ buttons of the One-touch Remote Control do not work and the color LEDs are lit, the ↑/↓/←/→ buttons work as color buttons. To use as the ↑/↓/←/→ buttons, press the COLOR KEY button to turn off the color LEDs.

- If the color buttons of the One-touch Remote Control do not work, press the COLOR KEY button. The color LEDs light up and the color buttons can be use.

Batteries drain quickly.

- If you keep waving your NFC compatible device over the NFC touch point on the rear of the remote control, it will increase battery drain. It may be improved by keeping the NFC device away from the remote control.

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Bluetooth Mouse Symptoms

- Operation cuts out, or a device does not work.

Operation cuts out, or a device does not work.

- Check if the device is turned on.
- Replace the batteries of the device.
- Re-register the device.
- Bluetooth devices use 2.4GHz bandwidth, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference. If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or mouse may not work on a metal rack due to wireless communication interference.
- For usable communication distances between the TV and other devices, refer to the instruction manuals of the devices.

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Screen mirroring Symptoms

- What kind of devices can be connected to use the Screen mirroring function?
- The TV cannot connect to a Miracast compatible device.
- Video or sound sometimes cuts out.
- Some pay contents cannot be played.

What kind of devices can be connected to use the Screen mirroring function?

- Sony Screen mirroring compatible devices (e.g. some models of Xperia) can be connected.
  The Screen mirroring function works by Miracast technology, making it possible to connect with a device that conforms with Miracast.

The TV cannot connect to a Miracast compatible device.

- If connecting a Miracast compatible device (e.g. note PC) fails, press the HOME button, then select [Connected Devices] → [Screen mirroring] to show the standby screen for the Screen mirroring function.

Video or sound sometimes cuts out.

- Devices emitting radio waves, such as other wireless LAN devices or microwave ovens, may interfere with the Screen mirroring function using wireless LAN. Keep the TV or Sony Screen mirroring compatible devices (e.g. some models of Xperia) away from such devices, or turn them off if possible.
- Communication speed may change according to the distance or obstacles between devices, device configuration, radio wave condition, line congestion or what device you use. Communication may cut out due to the radio wave condition.

Some pay contents cannot be played.

- The source device needs to be compatible with HDCP (High-bandwidth Digital Content Protection) 2.0/2.1 system.
  Some pay contents may not be displayed via a non-compatible source device.

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Using “BRAVIA” Sync Devices
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One-touch mirroring Symptoms

- One-touch mirroring does not work./Target device cannot be recognized.

One-touch mirroring does not work./Target device cannot be recognized.

- For connection with One-touch mirroring compatible Xperia, the TV cannot connect with Xperia when its screen is locked. Release the screen lock, then touch.
- Determine the position of the NFC detection area on the One-touch mirroring compatible device, then try touching again. For the position of the NFC detection area, refer to the instruction manual of the compatible device.
- Once move the compatible device away from the One-touch Remote Control, then try touching again.
- Only compatible devices, such as some models of Xperia, can be recognized by One-touch mirroring.
- It is necessary to register the One-touch Remote Control to the TV before use.
- Set the NFC setting of the compatible device to on.

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TV SideView Symptoms

- The TV cannot be turned on and controlled by using the TV SideView application when [Remote Start] is set to [On].

The TV cannot be turned on and controlled by using the TV SideView application when [Remote Start] is set to [On].

- When devices that cause radio wave interference (microwave ovens, cordless phones, etc.) are placed nearby, the TV SideView function may not work. In this case, keep such devices away from the access point or TV, or turn them off.
- In the following cases, the TV SideView function may not work. Turn on the TV and re-connect to the access point.
  - Turn on/off the access point power during TV standby mode
  - Reset the access point during TV standby mode
  - Change the access point channel during TV standby mode
- The TV SideView function may not work with business-use access points that require re-connection periodically.
- The TV should be in the power-on or standby mode. Do not turn off the TV by disconnecting its AC power cord.
- Check the following has been set for your TV.

  When the access point and TV are connected with wireless LAN
  - Built-in wireless LAN model TV is used
  - [Built-in Wireless LAN] under [Network] is set to [On]
  - [Remote Start] of [Home Network Setup] under [Network] is set to [On]
  - TV is connected to the access point
  - TV SideView application cannot be used if USB Wireless LAN Adapter is inserted

  When the access point and TV are connected with wired LAN
  - [Remote Start] of [Home Network Setup] under [Network] is set to [On]

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Wi-Fi 5GHz Symptoms

- The TV cannot connect with your wireless router (or access point) at 5GHz.

The TV cannot connect with your wireless router (or access point) at 5GHz.

- Use the optional USB Wireless LAN Adapter to connect with your wireless router (or access point) at 5GHz. Then, set [Wi-Fi Direct] to [Off]. Press the HOME button, then select [Settings] → [Network] → [Wi-Fi Direct] → [Off].

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Notes

- This manual is the simple version of the TV's built-in i-Manual. For details, refer to that i-Manual.

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Supported Codec for DLNA / USB device
DLNA/USB设备支持的编解码器
Codec Suportado para dispositivo DLNA/USB

Photo
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Music
音乐
Música

Video
视频
Vídeo

External Subtitle
外挂字幕
Legenda Externa

Photo
照片
Foto

File Format 文件格式 Formato do Arquivo	Extension 扩展名 Extensão
JPEG	*.jpg / *.jpe / *.jpeg
MPO	*.mpo
RAW	*.arw

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Music
音乐
Música

Container 封装格式 Recipiente	Extension 扩展名 Extensão	Description 描述 Descrição	Supported Sampling Rate 支持的采样速率 Taxa de amostragem suportada

-	-	LPCM	32k / 44.1k / 48k
	*.mp3	MP1L1 / MP1L2 / MP1L3 / MP2L1 / MP2L2	32k / 44.1k / 48k
		MP2L3	16k / 22.05k / 24k
		MP2.5L3	8k / 11.025k / 12k
	*.wav	WAV	32k / 44.1k / 48k
mp4	*.mp4 / *.m4a	AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
		HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
3gpp	*.3gp / *.3g2	AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
		HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
Asf	*.wma	WMA9 Standard	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k

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Video
视频
Vídeo

Container 封装格式 Recipiente	Extension 扩展名 Extensão	Video Codec (Profile@Level) 视频编解码器 (Profile@Level) Vídeo Codec (Profile@Level)	Audio Codec 音频编解码器 Áudio Codec[241]	Supported Subtitle Type 支持的字幕类型 Tipo de Legenda	Supported Maximum Resolution 支持的最大分辨率 Resolução Máxima	Supported Minimum Resolution 支持的最小分辨率 Resolução Mínima	Supported Maximum Frame Rate 支持的最大帧率 Frame Rate Máximo

				Surpotada	Suportada	Suportada	Suportado
MPEG1	*.mpg / *.mpe / *.mpeg	MPEG1	MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MPEG2PS	*.mpg / *.mpe / *.mpeg	MPEG2 MP@HL, MP@H14L, MP@ML	MPEG1L1 / MPEG1L2 / LPCM / AC3	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MPEG2TS	*.m2t	MPEG2 MP@HL, MP@H14L, MP@ML	MPEG1L1 / MPEG1L2 / AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3	- Internal -	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
	*.m2ts / *.mts	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0		- Internal -	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
MP4	*.mp4	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6,			1920x1080	QCIF	1920x1080@30fps

		ASP@L5, ACEP@L4				(176x144)	1280x720@60fps
avi	*.avi	Xvid	MPEG1L1 / MPEG1L2 / MPEG1L3 / AC3 / E-AC3	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		Motion JPEG	μ-LAW / PCM(U8) / PCM(S16LE)	External 外部 Externo	1280x720	QCIF (176x144)	1280x720@30fps
Asf	*.asf *.wmv	VC1 AP@L3, MP@HL, SP@ML	WMA9 Standard	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MKV	*.mkv	Xvid	DTS core / AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	Internal / External 内部 / 外部 Interno / Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0			1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		VP8			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps

3gpp	*.3gp / *.3g2	MPEG4 SP@L6, ASP@L5, ACEP@L4	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0			1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
RealMedia	*.rm / *.rmvb / *.rv	RealVideo RV8 / RV9 / RV10	RealAudio sipro / cook / aac	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MOV	*.mov	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2 / μ-LAW / PCM(U8) / PCM(S16BE) / PCM(S16LE)	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		Motion JPEG			1280x720	QCIF (176x144)	1280x720@30fps
				Internal /			

WebM	*.webm	VP8	Vorbis	External 内部 / 外部 Interno / Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps

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Supported Audio Codec Sampling Rate in Video Content
视频内容中支持的音频编解码器采样速率
Taxa de Amostragem do Áudio Codec em Conteúdo de Vídeo

Audio Codec 音频编解码器 Áudio Codec	Supported Sampling Rate 支持的采样速率 Taxa de Amostragem Suportada
LPCM	44.1k / 48k
MPEG1L1 / MPEG1L2	32k / 44.1k / 48k
MPEG1L3	32k / 44.1k / 48k
AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
AC3	32k / 44.1k / 48k
E-AC3	32k / 44.1k / 48k
Vorbis	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k
WMA9	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k

DTS core	8k / 11.025k / 12k / 24k / 16k / 22.05k / 32k / 44.1k / 48k
RealAudio(sipro)	8k / 16k
RealAudio(cook)	8k / 11.025k / 22.05k / 44.1k
RealAudio(aac)	24k / 32k / 44.1k / 48k
μ-LAW	8k
PCM(U8)	8k
PCM(S16LE)	11.025k / 16k / 44.1k
PCM(S16BE)	11.025k / 16k / 44.1k

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External Subtitle
外挂字幕
Legenda Externa

File Format 文件格式 Formato do Arquivo	Extension 扩展名 Extensão	Supported Use Case 支持范围 Caso de Uso Suportado
SubStation Alpha	*.ass / *.ssa	USB
SubRip	*.srt	USB
MicroDVD	*.sub / *.txt	USB
SubViewer	*.sub	USB

SAMI	*.smi	USB

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